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A 487822

The image shows the front cover of an old book. The cover is decorated with a dark brown marbled paper featuring large, irregular, cell-like patterns in shades of brown and tan. The edges of the cover are worn and show the underlying board material. A small, white, rectangular label is affixed to the top edge, containing the text 'A 487822' in a black, sans-serif font. The spine of the book is visible on the left side, showing a similar marbled pattern.

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PROCEEDINGS *from the 7th Annual*

OF THE

TENTH CONVENTION OF AMERICAN INSTRUCTORS

OF

THE DEAF.

HELD AT BERKELEY, CALIFORNIA,

JULY 15-22, 1886.



SACRAMENTO:

STATE OFFICE : : : P. L. SHAW. SUPT. STATE PRINTING.
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of resuming these conventions. At that gathering there were twenty-six delegates present, mostly heads of institutions, representing fourteen schools; the meetings of the convention being thus revived at what was called the sixth convention.

The seventh was held at Indianapolis, in 1870, twenty-four schools being represented by one hundred delegates.

The eighth was held at Belleville, Province of Ontario, in 1874, twenty-seven schools being represented by one hundred and forty-seven delegates.

The ninth was held at Columbus, Ohio, in 1878, thirty-four schools being represented by one hundred and forty-seven delegates.

The tenth and last convention was held at Jacksonville, Ill., in 1882, thirty-two schools being represented by one hundred and eighty-four delegates. That convention was regarded as the most successful as it was the most numerous attended of any convention up to that time. It was a notable gathering, one that we all remember; and I recollect as one present upon that occasion that we questioned whether we had not reached the summit of our greatness as a Convention of American Instructors of the Deaf and Dumb. At that time there was talk of an attempt to hold a convention in California. Many said it would be exceedingly pleasant to go, but it was doubted whether enough could be induced to go to make it worth while to hold a convention in this State. The subject was under consideration somewhat at that time, and about two years later quite formally, but the matter was postponed; and last winter, when the Executive Committee had before it the very courteous and warm invitation of the officers of this institution to meet here at this time, there was even then some doubt expressed as to whether it was expedient to attempt to hold the convention so far away from the Eastern States as the Pacific Coast would be. But the committee decided, without consultation outside of its own body, to accept this kind and cordial invitation, and to hold the convention here. Measures were then taken, as the most of you are aware, by Mr. Wilkinson, with the coöperation and assistance of Dr. Gillett, in the matter of transportation; the enthusiasm grew, the number who were to come grew, and I hardly need to tell you now that the Eleventh Convention of American Instructors of the Deaf, meeting here in Berkeley, California, represents a larger number of schools than has ever been represented in any convention. [Applause.] Forty-one schools are known to be represented in this convention, and probably two hundred and twenty-five to two hundred and thirty delegates. [Applause.] So our western friends, if I may be allowed to speak as from the East, will see that neither the Rocky Mountains, nor the barren American desert, nor the Sierra Nevada, nor the matter of expense, nor anything else, has stood in the way of our earnest desire and purpose to be present at the meeting of this convention. [Applause.]

I will read some extracts from the call for the convention, as it is my duty to do:

NATIONAL DEAF MUTE COLLEGE, KENDALL GREEN, NEAR WASHINGTON, D. C., }
March 22, 1886.

At the Tenth Convention of American Instructors of the Deaf and Dumb, held at Jacksonville, Illinois, August 26-30, 1882, the following resolution was adopted:

Resolved, That all invitations for the next convention be referred to the standing committee, who are hereby authorized to take all necessary action in the premises.

At a meeting of the committee, held in New York December 10, 1885, a communication was presented from the Board of Directors of the California Institution for the Education

of the Deaf and Dumb and the Blind, through Mr. Warring Wilkinson, Principal, inviting the convention to meet in Berkeley, at their institution, during the summer of 1886.

An invitation was also presented from the Board of Trustees of the Iowa Institution for the Education of the Deaf and Dumb, through Mr. Henry C. Hammond, Superintendent, offering the hospitalities of their institution to the convention.

On taking the sense of the committee, a disposition to accept the invitation to California proved to be unanimous. In consideration of the several invitations to California which had come before the committee in former years, and which they had felt compelled to decline, it was with especial satisfaction the committee recognized the fact that nothing now stood in the way of accepting the proffer of hospitality so generously renewed, and of which very many members of the profession had long desired to avail themselves.

Notice is accordingly hereby given that the eleventh convention will be called to order in the California Institution on Thursday, the fifteenth day of July, 1886.

DR. GALLAUDET then suggested that the Hon. Erastus Brooks, of New York, well and favorably known, and highly honored and of great prominence in that State as the founder and conductor of the "New York Express," the President of the Board of Directors of the New York State Institution, be invited to take the chair as the temporary Chairman of the convention. This suggestion in the form of a motion was put to the convention and carried; and the Hon. Erastus Brooks was escorted to the chair amidst great applause.

MR. BROOKS: Ladies and Gentlemen, Principals, Teachers, Superintendents, and friends of the deaf and dumb in these United States of America, I count it a very high honor to be permitted to preside temporarily over your deliberations to-day. My interest in the instruction of the deaf and dumb extends back to fully thirty years ago, when as a citizen of the State of New York, in the Senate of that State, it was my privilege, upon the earliest petition of the friends of the deaf and dumb in the State, to do something for the relief of an institution which at that time was covered, I may say, all over with debt. The debt has gone, the institution is free from obligations, and it opens wide its arms to receive all who need its instruction. And from the one institution in the State of New York has grown seven other institutions, until, from Lake Erie to the Atlantic, almost every home has a school for the deaf brought to its own fireside. Whenever I have an opportunity, I take great pleasure in doing honor to the States of this Union which show a just appreciation of those who need the forms of instruction which are extended here. We open wide our gates to all those who are blessed with speech and with hearing; and in the providence of God, and in the natural humanities of men, it is but a public duty, as it is a great privilege, to extend to the children of the land, to the deaf and dumb, privileges in common with those who are blest with speech and hearing. [Applause.]

Our friend who called this meeting to order, has alluded by numbers to the growth of the institutions of the country. Now, I do not like to consider myself a very old man, yet I am older in years than any institution in the United States of America; showing how great must have been the neglect in the early periods of the history of the country of a proper appreciation of the interests of this class of unfortunate people.

The first institution was established in 1817; the second, of which I have the honor to be President, was established but a year later. And from that time to the present year, as you have witnessed, there have been established over forty institutions in the country; and there are, as near as I can find out, over thirty-three thousand people in this country who, in one form or another, either as citizens or as pupils, are interested in this class of instruction. And in a country

like this it is destiny, or to use a more proper word, it is in the providence of God that what has been and is will grow and enlarge until every child afflicted with the absence of these blessings which some of us enjoy, shall have, free as the water that flows or the sun that shines, the blessings of this kind of instruction. [Applause.]

It is now my privilege for the first time to be in this State of California. I can say, as one advanced in years, it was a journey that tires the mind and wearies the body. But as good news that comes from a far country, as cold water is to the thirsty soul, so is our welcome to our place of rest here. [Applause.] I have seen manifested as I never anticipated before, the growth of this great nation. The dozen of States that some of us have passed through, the representation here to-day of every institution in the country excepting three, shows the power, the concentration and purpose of will, and general interest in an occasion like the present. Many of us have come here from a natural curiosity to see the Pacific Ocean, and this State, which has so long been prosperous upon it. Our eyes have been greeted with foliage, with flowers, with a bloom and beauty that certainly I never saw before. And I am happy to know and believe that, in the growth of this nation, it is not place, nor States, nor long distances, whether in the State of Maine, where I was born, or in the State of New York, where I lived for fifty years and more, or here, but that we are all of one country, one constitution, one destiny, and one humanity. [Applause.]

No geographical bounds can hereafter separate the American people. [Applause.] And it is pleasant to see and know, and most of all to feel, that, whatever may be our conditions in life, under the flag which floats over our heads to-day the government which the people represent, and of which we are a part, finds faith, prosperity, and happiness in the perpetuation of this unity. [Applause.]

I thank you, my friends, very cordially for the honor of presiding here temporarily to-day, and I wish you godspeed in the deliberations of the days to come. I await the further order of this convention. [Applause.]

On motion of DR. I. L. PEET, of New York, which was put and carried, it was declared that the proceedings of this body be governed by the ordinary rules of parliamentary practice.

MR. D. L. ELMENDORF moved that a committee of three on credentials and the enrollment of members be appointed. The motion was put and carried unanimously, and the following members were appointed by the Chair: D. C. Elmendorf, of New York; Willis Hubbard, of Michigan, and W. A. Caldwell, of Pennsylvania.

On motion of MR. G. O. FAY the Chairman recommended a committee of five for the consideration of the convention as permanent officers, which recommendation was duly seconded and carried unanimously: G. O. Fay, of Connecticut; W. O. Connor, of Georgia; W. S. Marshall, of Missouri; G. W. Veditz, of Maryland; Sister Mary Anne, of Buffalo, New York—which committee retired for deliberation.

Letters of regret from the following absentees were then read by Mr. Wilkinson:

WISCONSIN SCHOOL FOR THE DEAF, }
DELAVER, WISCONSIN, July 5, 1896. }

Superintendent WARRING WILKINSON, Berkeley, California, Institution for Deaf, Dumb, and Blind:

DEAR SIR: It is the occasion of sincere and lasting regret on my part that I am unable to accept the generous hospitality of your institution and participate in the profit and pleasure of the convention.

My thoughts and best wishes attend the deliberations of the convention, and I have no doubt that much practical truth and knowledge will be elicited. I trust that the subject of articulation as a branch of our institution work will receive its share of attention, and have no doubt that the oral branch of our institution work is deserving of more careful attention than it usually receives.

With fraternal greetings to all, I have the honor to remain,

Sincerely yours,

JOHN W. SWILER,
Delavan, Wis.

ALABAMA INSTITUTION DEAF, DUMB, AND BLIND, }
TALLADEGA, ALABAMA, July 4, 1886. }

Professor W. WILKINSON, Principal California Institution Deaf, Dumb, and Blind:

MY DEAR SIR: I regret exceedingly that I am not able to be with you at the convocation. No little matter would keep me away. Until two days ago I thought our institution would be represented by at least two of our teachers, but for some reason I understand they have concluded not to go. I regret it. Please convey to the ladies and gentlemen who are so fortunate as to be with you my warmest and kindest regards, and best wishes that the occasion may be most enjoyable, as I know it will be profitable. For yourself and family accept the assurance of my high esteem.

Very truly, your obedient servant,

J. H. JOHNSON,
Principal.

BOULDER, COLORADO, May 3, 1886.

Mr. WILKINSON:

DEAR SIR: Your very kind letter reached here the twenty-eighth ultimo, and I would have replied at once had I not daily expected advice from my physician which would probably settle the matter of my going to California. His letter came this morning, and I find he is not willing to assume the responsibility of my going. I do not like to take the matter into my own hands, as I am unwilling to do anything that might hinder my recovery, and so, perhaps, prevent my returning to my work in the autumn.

Until recently, I have been very hopeful that Miss C. A. Yale, our Associate Principal, would attend the convention, but it is now quite settled that she cannot.

I hear from the institution that Miss Sparrow, one of our teachers, and Miss Cowles, an attendant, are intending to go to California to join the convention. I will ask Miss Yale to write you whether they have friends with whom they will stay, or whether they will accept your kind hospitalities.

I regret very much that Miss Yale cannot go to represent our institution. I am very sorry not to meet our fellow laborers in council, and not to see your wonderful country, but it does not seem best that I should do so now.

Accept many thanks for your very cordial invitation, and believe me,

Most truly yours,

H. B. ROGERS.

INSTITUTION FOR THE INSTRUCTION OF THE BLIND, }
NORTH BOUNDARY AVENUE, BALTIMORE, May 12, 1886. }

My Dear WILKINSON:

I have postponed writing to you this long, hoping that circumstances might possibly so shape themselves that I would be able to accept your kind invitation to visit the Pacific Coast this summer, but the longer I wait the worse they get, so I have at last decided, most reluctantly, to give up all hope of being one of the party who will enjoy your hospitality. The educators of the blind will meet in New York early in July, and, of course, I am expected to be present. In addition, we shall have to build for our colored school, and I shall have to make some extensive repairs at home which will require my supervision. I cannot tell you how much I regret my inability to journey westward this summer. I feel that I may never again have such an opportunity to visit you, unless you should some day decide to invite us blind folks to hold a convention at your institution. I had hoped to see you in New York this summer. I believe you have attended but two of our conventions, Boston and Philadelphia. Of course when I cherished the hope of having you with us, I did not know that you were going to have a convention at your institution.

Regretting that I shall not be one of your fortunate guests, and with respects to Mrs. Wilkinson, I am,

Very truly yours,

F. D. MORRISON.

INSTITUTION FOR THE DEAF AND DUMB, }
JACKSON, MISSISSIPPI, June 28, 1886. }

WARRING WILKINSON, Esq., Berkeley, California:

DEAR SIR: Yours of May twentieth is to hand. I am sorry to say I cannot attend convention. I have been looking forward to this pleasure for years, but I find I will

to forego it, and am trying to take it like a philosopher. I expected when the convention was called, to go, but I find it out of my power now. None of our teachers can go, and we will have to be without a representative. I would be glad to know you personally, and visit your institution, but must reserve those pleasures for some future time.

Hoping you may have a pleasant and profitable convention, I am,

Yours truly,

J. R. DOBYNS.

INSTITUTION FOR THE IMPROVED INSTRUCTION OF DEAF MUTES, }
LEXINGTON AVENUE, BETWEEN SIXTY-SEVENTH AND SIXTY-EIGHTH STREETS, }
NEW YORK, April 26, 1886.

Mr. W. WILKINSON, *Principal, etc.*:

DEAR SIR: Yours of the eighth instant is received. I have sent you all our reports that you asked for, except the second, which is out of print.

In answer to your question, I desire to say that this institution will not be represented at the coming convention. But I hope and wish that the gathering may prove agreeable to those who will attend it, and that it may result in a great deal of good to our cause.

Yours truly,

D. GREENBERGER.

NEW MEXICO SCHOOL FOR THE DEAF AND DUMB, }
SANTA FE, NEW MEXICO, July 8, 1886.

Professor W. WILKINSON, *Berkeley, California*:

DEAR SIR: Owing to present circumstances, I regret my inability to come and attend your coming convention. With best wishes for the success of the convention, I am,

Yours, very respectfully,

LARS M. LARSON, *Principal*.

ASYLUM FOR THE DEAF AND DUMB, }
VICTORIA ROAD, MARGATE, KENT, June 3, 1886.

Dr. GILLETT:

DEAR SIR: Allow me to thank you most heartily for your very kind invitation to me to take part in the forthcoming convention in California, and to express my extreme regret that circumstances do not allow me to accept it.

As a teacher, nothing would give me greater pleasure than to witness, for myself, the great things that are done among you for the deaf mute, and to meet and take counsel with those who so enthusiastically and successfully work for him. In addition I very much desire to see for myself something of your great country, which none of us here look upon as a foreign one. We regard you rather with the feeling with which a parent looks upon a grown up child, gone forth on an assured and splendid career, whom he has taught many things, and who in many others has improved upon his teaching. And in the present case, in our own particular work, you have gone, as I believe, far ahead of us; but the parent is not yet decrepit, even if she be old, and may yet run side by side with you in the glorious work of ameliorating the immense disadvantages which arise from deafness. In another particular, too, according to your kind letter, you have far exceeded the example we set you, for while we are content with one Queen—and a right good one she is—"everybody," you say, "is a king or a queen over here." What a *monarchy* yours must be! Thanks very much for the royal republican welcome you offer. I wish I could accept it.

The programme of your journey, too, makes one dissatisfied and disappointed not to be able to share in so splendid a trip.

I can only add my earnest hope that the convention may be a highly successful one, fraught with success in the elucidation of the many problems our common work presents, and a pleasant and happy holiday for all those who participate in it.

Very truly yours,

RICHARD ELLIOTT.

GUION MAIL STEAMER ALASKA, June 27, 1886.

My Dear Mr. WILKINSON:

I am very sorry not to be with you all in convention assembled, but affairs of a personal interest seemed rather to have called me this way. We are now approaching Queens-town, and with my best wishes for a successful convention, and kind remembrances to all friends, I am,

Fraternally yours,

E. B. NELSON,
Principal Central New York Institute for Deaf Mutes, Rome, N. Y.

SOUTH CAROLINA INSTITUTION FOR THE EDUCATION
OF THE DEAF AND DUMB AND THE BLIND, }
CEDAR SPRING, SOUTH CAROLINA, July 7, 1886. }

Mr. W. WILKINSON, *Berkeley, California*:

MY DEAR SIR: It has been a great disappointment to me to be obliged to give up my long and fondly anticipated trip to your great State, and not to be able to participate in the work of the convention. Our Mr. Rogers will be with you and will represent our State and school.

Please present my love to the members of the convention, with the assurance that I shall be with them continually in thought and desire for harmony and success.

Yours, very truly,

N. F. WALKER.

WEST VIRGINIA INSTITUTION FOR DEAF MUTES AND THE BLIND, }
ROMNEY, WEST VIRGINIA, June 24, 1886. }

Dr. PHILIP G. GILLETT:

MY DEAR SIR: I find at the eleventh hour, to my deep regret, that I shall not be permitted to join the grand expedition to California, so skillfully planned and arranged by you, at the cost of so great labor and painstaking on your part, on account of recent affliction in our family, at the same time doubting whether I could stand the trip, if free to go. I shall always regret the loss of this opportunity, not only of not journeying to the land of the "setting sun," in company with old associates in our life's work, and others whom I desire to know, but above all, of not being present to participate in the proceedings of so important a convention.

Remember me most kindly to Mr. Wilkinson, and express these regrets to him and all of our profession.

Very truly yours,

JNO. C. COVELL.

NATIONAL COLLEGE FOR THE DEAF, }
WASHINGTON, D. C., July 8, 1886. }

Mr. WARRING WILKINSON, *Principal California Institute*:

MY DEAR SIR: Will you please say for me to the transcontinental convention, assembled within your hospitable walls, that I regret deeply my inability to be present at an assemblage which, by virtue of numbers, intelligence, experience, and enthusiasm, gives promise of great helpfulness to its members, and of increased efficiency to every department of the arduous and ever growing, yet, upon the whole, delightful work to which so many have consecrated their lives.

While congratulating those present upon these "red letter" days, I feel that nothing short of a personal apology, from stay-at-homes, like myself, is due to Dr. Gillett, who has made mole hills of mountains. And now will you not whisper in our magician's ear dreams of, say, London or Paris as the seat of the next convention!

With personal regards for yourself, I remain,

Yours, truly,

J. C. GORDON.

MR. JOB WILLIAMS, of Hartford, also presented a verbal message from W. W. Turner, of Hartford, Connecticut, eighty-six years of age.

THE CHAIRMAN (Mr. Brooks): Ladies and gentlemen, before the report as to permanent organization is received, as it is not yet ready, I will make a single remark, to show the growth of the country in some respects.

It was just one year ago this day, July 15, 1885, that I had the pleasure of presiding over a convention held at Niagara Falls to commemorate an event in which every citizen of the United States has an interest—that from July, 1885, and forever thereafter, the Falls of Niagara are free to the people of the United States, by the payment of a million and a half of dollars for the purchase of that privilege from those who owned the territory and the water front there. And I am reminded of that event by the suggestion which has been made in the letter from Mr. Elliott, that hereafter, in his own good time, and with just consideration for the taste and desires of those interested in the deaf and dumb in the country at large, some convention be held upon the other side of the Atlantic, where all who are interested in the deaf and dumb in the United States may meet their

friends abroad. Whether or not that event will ever happen, I know not; but the letter which has just been read from our friend in London, manifesting an interest in this work and in this convention, shows that, though we may be as wide as the poles apart, we are really of one heart, one mind, and one purpose, in the desire to secure the greatest good of the greatest number of people all over the earth. [Applause.]

MR. I. N. TATE, of Missouri, stated that W. D. Kerr, of that State, seventy-eight years old, intended until a few days before starting to have been here, but was unable to attend, which accounted for his not sending a letter of declination.

The Chairman of the Committee on Nominations then read the following report of that committee, recommending the following permanent officers:

President, Philip L. Gillett, LL.D., of Illinois. Vice-Presidents—Professor Samuel Porter, of Washington, D. C.; Dr. W. H. Latham, of Indiana; J. A. Gillespie, of Nebraska; D. C. Dudley, of Colorado; T. L. Moses, of Tennessee; R. Mathison, of Ontario; Miss Anna M. Black, of Rhode Island. Secretaries—H. C. Hammond, of Iowa; Theophilus D'Estrella, of California; and A. S. Clark, of Connecticut.

The report was unanimously adopted.

The President-elect, PHILIP L. GILLETT, was then conducted to the chair amid great applause, and addressed the convention as follows:

LADIES AND GENTLEMEN, FELLOW CITIZENS, BRETHREN, SISTERS, AND FATHERS: It is with no slight emotion that I thank you for the great honor that you confer upon me in calling me to this position. And I trust you will understand that I say "please accept my thanks," not because it is customary, but because I regard this as the highest honor to which I could aspire, an honor to which I have not dared to aspire. I have felt it a sufficient honor to have tried for a few days or weeks past to contribute to the comfort and the pleasure of the members of the convention, and to serve them as best I might be able in a very humble capacity. [Applause.]

We are here, my friends, for work. While to many it may have appeared that we were upon a pleasure excursion, yet we are engaged in a great and a grand work. We are here as workers in a great cause; to inquire and to learn how we may work more effectively than we have been able to do thus far. We are here a cosmopolitan gathering, so to speak; not only from this country of ours, but from our neighbors upon the north, in the Dominion of Canada, and I think that we shall in a few days clasp the hand of one who will come to us from across the Pacific. We are here from the Blue Ridge, the Alleghanies, the Rockies, and the Sierras; we are here from the St. Lawrence, the St. John on the northeast and the St. John in the southeast; from the Rio Grande in the southwest, and from "where rolls the Oregon, and hears no sound save its own dashings." And as we are thus gathered from all over this country with reference to one purpose and one aim, so we are here wedded to no particular method, ready to grasp and avail ourselves of anything that is new, and ready to surrender anything that is old, when a better is presented. [Applause.] But never to give up that which is good until we get the better. [Applause.]

We are living and dwelling in a grand, an awful time; "In an age

on ages telling, to be living is sublime." In such an age are we living, and in such work are we engaged.

The Chairman of the committee has referred to the growth of this convention. That is something in which he may take very great pride; wherein we may rejoice. But I rejoice far more in the fact that this growth of the convention is but an exponent of the great moral humanitarian sentiment that exists and pervades this land of ours. [Applause.]

We are here to equip ourselves better for the work that lies before us, and that has been committed to us. We all, in a measure, sustain the relation of trustees; for certain purposes we are the trustees of the people of this great continent. And while the pecuniary or money view is not the highest in which to regard questions of this kind; yet very often the pecuniary and the money view is the sentiment and principle that animates the best of the people when they pour out their money by millions. More than ten millions of the money of the people of this country are represented here this morning by the delegates, members of this convention. It is a great trust that has been committed to us by this grand, this noble, and this humanitarian people, and I think that it is in recognition of this trust, and under a sense of duty that we are assembled here this morning upon the western border of our land of flowers, of beauty, and of brightness. We have enjoyed our journeying, and threading our ways through the mountains and across deserts; and we have landed in this paradise. We have found already in a good measure that for which we came West. We had scarcely set our feet upon this beautiful State; had scarcely looked upon these structures that stand here in their stability and beauty, before every one felt that we had learned a lesson that we might well carry back to our homes, to our people, and to our pupils. [Applause.]

But I must not consume time in talking longer. I would gladly give you many promises as Chairman of this convention; but you will certainly be better satisfied with performance; and while I will try to do the best I can, I shall be under the necessity of asking your charity and your assistance in this responsible position. The convention is now ready for business. [Applause.]

The following committee was then appointed on Order of Business: A. L. E. Crouter, of Pennsylvania; C. W. Ely, of Maryland; S. T. Walker, of Kansas; J. B. Hotchkiss, of Washington, D. C.; Miss J. A. Shrom, of West Pennsylvania.

MR. ERASTUS BROOKS made a motion that the time occupied in the reading of any one paper shall not exceed fifteen minutes.

MR. GALLAUDET moved to amend so as to have the matter referred to the business committee for their consideration.

MR. BROOKS also made it part of his motion that the discussion of papers be limited to five minutes for each member who desires to speak.

MR. G. O. FAY desired to amend further by making it ten minutes.

The second amendment being put to vote was adopted, limiting the discussion to ten minutes. The motion to refer to the business committee was carried.

The Chair then nominated as interpreters for the deaf mutes Rev. Thos. Gallaudet, F. W. Booth, and W. K. Argo, and upon motion they were unanimously chosen.

MR. WILKINSON then extended to the convention an invitation to take an excursion around the bay on Saturday next.

DR. PRET, of New York, moved that Mr. Wilkinson be made a committee of invitation to invite to the sessions of the convention, ladies and gentlemen who have taken special interest therein.

This motion was seconded and carried unanimously, and the appointment was made.

On motion of MR. JOB WILLIAMS the following Committee on Necrology was appointed by the Chair to prepare obituaries: Job Williams, J. A. Kennedy, Miss Mary R. Harris, E. L. Chapin, and E. A. Fay. Mr. Wilkinson was given power to offer honorary memberships to prominent men of the State.

The following paper, entitled "Is There a Better Way?" was then read by D. C. DUDLEY, of Colorado:

IS THERE A BETTER WAY?

To every thoughtful Superintendent of an institution for deaf mutes there has doubtless occurred the question whether or not even our best regulated schools are doing all for those committed to their care that an enlightened public has a right to demand; whether, in short, we are rendering a *quid pro quo* to our respective States for the burden they assume in supporting such institutions, and if not, whether the failure is the result of the inherent difficulties of the task we have set ourselves, or because we are not following the very best road to success.

The consideration of the subject is forced upon us by the everywhere apparent fact that many deaf mutes, even after every advantage has been afforded them, continue to be helpless charges to their friends through life. They seem to know how to do very little, and to be indisposed to do even that. They run about from place to place seeking, it would seem, a soft job, or that El Dorado where money grows upon trees, and where hard labor is unknown. They are entirely destitute of that manly independence which would prompt them to indignantly reject any favor offered them because of their deafness, and, in fact, count themselves in luck when a sympathetic public lends them unmerited assistance on account of their affliction.

Now, while it is a matter of thankfulness that this is a picture of only a minority of the class, still that minority is so considerable a part of the whole as to challenge our attention and make us desire its reduction.

What, probably, is the source of this disposition to idleness and disregard of obligation? I do not hesitate to say that it is largely the result of the comforts and conveniences of life in well ordered institutions.

Let us follow one of our pupils through the day and see if we cannot get a clue to the matter. Arising at the prescribed hour he finds that the vigilant fireman has been up hours before him and warmed his dormitory so that he may dress leisurely and comfortably. He descends to the washroom, where hot and cold water are to be had in marble bowls for a slight pressure on a faucet. His ablutions finished, he hies him into a comfortable hall lighted by gas or electricity, where he joins his boon companions for a half hour's paradise of small talk. Breakfast is then announced, and, being ushered into a well appointed room, he finds that his servants—the State, the Super-

intendent, the steward, Matron, and cook—have furnished the means and done all the brain work and physical labor necessary to secure him a good substantial meal. Not having had to expend any of *his* energy to provide this food, he vents what he has upon criticising the staleness of the bread, the weakness of the coffee, and the strength of the butter, until he works himself and his companions up into the belief that he is doing the authorities a great favor by partaking of what is set before him.

After breakfast a little play, and then the labors of the day begin—labors of the officers and teachers, but not of the pupil. First of all, he repairs to the chapel, where the Superintendent delights him with a lecture which has cost an hour or so of brain work to prepare, and which he accepts as a matter of course. The teacher next takes the young gentleman in charge. He furnishes him with pads, pencils, books, slate, sponge, etc., and if he tears one, throws away another, and loses a third, a new article is on hand to take its place. The State is rich, you know, so there is no necessity for economy. The teacher, good, honest soul, puzzles his or her brain, and is often in an agony of anxiety lest the pupil should not learn. He, himself, however, wonders why any one should take the matter so much to heart. If the teacher can work up his own enthusiasm to a high pitch, and present his instruction in an attractive manner, and if any of it gets in among his mental furniture and sticks, well and good; but if it doesn't, what's the difference? The teacher has nothing to do but to teach it over again. He is paid, in fact, for this very thing, and therefore has no cause for complaint.

School over, a nice dinner, the result of somebody else's planning, awaits him, smoking hot, to afford consolation after the laborious duties of the morning. He sometimes gets merry when the meal is especially good, and wisely argues with his fellows that it is better to be a deaf mute than a poor speaking person.

After dinner he repairs to the shop and remains a couple of hours, but do not suppose he does so to work. Not much! A large share of the time he is talking, and another large share is devoted to watching the foreman take his (the pupil's) job over the hard parts. The remainder of the time he probably labors.

After work hours, if the Superintendent has had him a swing put up, or a croquet or baseball ground made, he plays; otherwise he talks till supper. This meal comes on in due time without any effort on his part, and he enjoys it without considering for a moment that it has cost either time or money.

The study hour is next on the tapis. Here, too, he has some one to wait upon him. A supervisor or teacher is on hand to lift him over all hard places, and give him the meaning, in signs, of all hard words, so that he may be spared the labor of consulting the dictionary.

And now the hour for retiring has arrived, and an inviting bed, spread with immaculate linen, washed by some one else, woos him to slumber and recuperation for the arduous toils of another day.

This is no fancy sketch, but one that appeals to your own experience. What wonder then that eight or ten years of such training leaves many deaf mutes helpless and dependent, unable to earn a living, and angry with the world because it exacts that they shall?

Industry is a matter of opportunity and development. It does not come naturally, but must be cultivated. It therefore devolves upon

us to devise ways and means to make our institutions training places for the real battle of life.

Steam heating and water pipes and laundry machinery cannot be dispensed with, and at the same time the efficiency of our schools preserved; but, a minimum of help being employed, our pupils may be required to wait largely upon themselves, to eat their bread in the sweat of their brow. The study should be, not how to make it easy for them, but how to make it difficult, and to give them, at least, a slight foretaste of what awaits them when they go out from our fostering care, into a cold, selfish world, to win their own bread.

Let much importance be attached to trades. Sometimes I have thought that all our institutions should be organized as industrial schools, with an incidental educational branch, rather than, as at present, with mental training absorbing the best of our energies and attention, while manual training is, so to speak, almost ignored. I am not unmindful of what has been done in this direction; of the comparatively great strides taken in the last ten years; still I believe that much remains for the future. I am convinced that an equal division of the time between manual and mental work would yield as good results educationally as are now attained, and would diminish materially the number of deaf mute peddlers, tramps, and cheats that are now such a disgrace to the class.

A single man laboring but a day may throw up a shell of a cabin, while it may require the labor of a score for as many months to erect a substantial building, still the latter is more economical in the end, and if we purpose making good, solid, substantial citizens of our pupils, and if we can make it clear to the public that that is the end in view, the economy of such a course will be recognized, and a sufficiency of both time and means will be allowed.

I devoutly hope that the time is not far distant when, being pressed and urged by Superintendents and Boards of Trustees, the law makers of every State will have it dawn upon them that taking away the faculty of hearing from a child does not necessarily make him so bright that he can master in six or eight years what is required of a hearing child in fifteen, and that being so enlightened as to the necessities of the case they may put all your institutions on a par with that of Colorado, where, if necessary, we may receive the little four-year old child and continue its training until it stands upon the threshold of manhood or womanhood.

THE CHAIRMAN: The paper is now before the convention for discussion.

MR. F. D. CLARK, of Arkansas: Ladies and gentlemen, I have listened to the first part of Mr. Dudley's paper with a good deal of surprise. All of my manhood has been devoted to the teaching of the deaf and dumb. I have been familiar with a great many institutions, and I have never seen the picture that he has drawn here of an indolent, good-for-nothing deaf mute, as a class. There may be, in large institutions, one or two boys that will fill that picture. But take our institutions straight through—those of them that I have the pleasure of knowing—and it is not so. I am at present at the head of an institution in which I have been but for a year, and in which it was the aim of the former Principal to make it hard for the deaf and dumb—to make them work. When I went down there I found that the girls of the school went into the washhouse and did all of the washing for that large institution. There were only about twenty

girls who were large enough to do washing, and they did all of the Principal's washing, all of the boys' washing, and all the bedding and everything, and in that hot climate they ironed, and if they did not get through by Saturday noon, they were simply told that they could work until they did get through. If to make it hard for the deaf and dumb helps them, ought not those girls to have been brighter than the girls of other institutions where they have less work to do? But it was not so. They were worked until, when they went to school in the morning, they said they were too tired to study, and they did not try as they do in institutions where they are not worked so hard, and they were a long way below the average of those institutions with which I had been connected in New York and elsewhere, in which I have taught for a great many years. I am sure that this picture drawn by Mr. Dudley does not apply to those institutions, and, in fact, I do not think that in the New York institution of over four hundred pupils there is ever more than one pupil to which it will apply, and I am sure that it does not apply here. I am sure that it does not apply in Minnesota, and in all of the institutions with which I am familiar that there is nothing of the sort. And, so far from making the work harder for our children, I believe in teaching them, not for the work that they do, but to prepare them to do work in the future. If you take a boy and make him work until he is so tired that his mind and body are both exhausted, he may learn in a kind of mechanical rut, that he can follow, but he will never be able to make an independent American workman, mentally.

MR. HENRY WHITE, of Salt Lake City (a deaf mute): We deaf mutes are much obliged to Professor Dudley for the reading of the essay. But I wish to dissent from some of his conclusions. In the first place it is not *deaf mute* nature to want a "soft job"—it is *human* nature. [Applause.] I know that these institutions help deaf mutes greatly, improve their minds, and make them desire to get on. Every class of people has drones in its busy beehive. But we know that the deaf mutes who do these things are always shunned by the majority of their fellows. We all look upon them with contempt. [Applause.] We often advise them to settle down to some steady work. In some places deaf mutes are steady, and earn their living, and they get together and order the idlers out of the place. I think it is not the fault of the institutions, but that it is from other causes, that such is the case.

MR. WILKINSON: I think this discussion has gone beyond where my motion is of any use. This paper has something to do with manual instruction, and I was simply going to suggest that this whole subject of manual instruction, touched upon in this paper, would properly belong to a general discussion, if there is to be such. I thought after hearing this paper, I would take an hour or so before the convention adjourned to finish a paper that I have already upon the subject, and with the permission of the committee, read it to the convention, but I do not care to do it if we are to have two or three different opportunities for discussion upon this same subject. If the convention thinks proper to set apart some particular time or portion of the day or week for the discussion of this whole subject of manual instruction, how it should best be given, its importance, and so forth, I would be glad then to take some part in it, either by the reading of a paper or by its discussion.

THE CHAIRMAN: That matter will rest with the Committee on

Business. They will soon be able to notify us what papers they will have, so that all papers upon one subject may be brought before the convention and discussed at one time. We are now waiting for that committee to report.

MR. DUDLEY: I desire a moment to say a word or two in self defense. I want to set myself right before the deaf mutes of this convention. I made no attack upon Mr. Harry White, or any other deaf mute in this convention. I presume that these deaf mutes here are earning their own living, and the only deaf mutes to whom I refer are those whom I have designated as a very small minority of the great deaf mute class, none of whom are here to-day. [Hear! hear!] I say there are a few such deaf mutes—not as a class—and that the public judge deaf mutes by this small minority, and I wish, if possible, to reduce even this small minority.

DR. PEET, of New York: We have had two pictures—two extreme pictures—brought before us at our session, which, unfortunately, occasionally exist, where a child of hearing, as well as the deaf, in the kindness felt by those who look after them, has too much done for him, is petted too much, and does not learn habits of self reliance, and is not able, from his training, to take suitable care of himself.

We all know that a boy who starts out to earn his own living, who is a self-made man, who learns self denial in early childhood, makes the strongest and the grandest man. We all know that a girl who is taught to assist her mother, to render her all those little kindly aids which the circumstances of every household demand, becomes the finest and best of women. We also know, that in those classes of society where children are sent to training schools from poor households, where the mothers, it may be, take in washing, and earn their living by the sweat of their brows, and pamper their girls, who are getting an education in the grand State Normal College, learning to play upon the piano, who come home and let their mothers do everything for them, and thenceforth, all of their lives, look down upon this poor, toiling, suffering woman, are the girls who make the very worst use of their advantages, those whom both society and their parents have spoiled. And we also know that in those poor Oliver Twist establishments, where the children are brought down to the very verge of starvation, who have to earn their living, as it were, by the sweat of their brow, who have no friends, nor means of palliation of their condition, how poor they are all their lives; how all the elasticity and strength is taken out of their young lives, how they are like the stunted oak upon the mountain—they amount to nothing. The truth lies between these two extremes. It is a grand thing to have had these pictures brought before us, as a warning, under all circumstances; it is well for us always to act with wisdom, with love, and with a true desire to make every child confided to our care, whether a deaf mute or a hearing person, such as it should be, in all of its connections and relations with the world. [Applause.]

MR. J. L. NOYES, of Minnesota: I am very glad that this subject has been brought before us. I am very happy to bear testimony to the fact that from my inquiries into the condition of the deaf mute children in our State institutions, my conviction is that the men who are at the head of these institutions endeavor to lay out before themselves a work which, in its bearings, shall not be temporary, but shall be permanent, and of an exceedingly high order; that they try to so arrange affairs in institutions of this kind, in all of their

departments, in their educational work, in their industries, in their amusements and recreations, in their social life, and in all their appointments, as it becomes a good, Christian household. We take these children, many, and, perhaps, the majority of whom, may be called the waifs of society—but these waifs do not all come from poor families—and we introduce them into this Christian household, and give them a start, give them an idea of what study, of what behavior, of what thoughtfulness, of what kindness, of what industry, and of what pleasure and recreation should be, and so establish them in all of their associations, and so fix habits in them that by the time they go out into the world they are rooted and grounded in those primary, fundamental principles which characterize a good citizen, and a useful member of society. We all know by experience that it takes quite a time to habituate a boy who has run riot in the household, who has never known anything about discipline, or what deference he ought to pay parents, brothers, and sisters, to observe the rules of the household. I could give you chapter and verse in some of our very best families, were it necessary. Put such a child as that into a Christian school, let him from day to day rise at the proper time, make him pay proper attention to his ablutions, to his necessary fitness of apparel, to his behavior at the table, and deportment on the playground and in the school-room, and in all places; let him become habituated to that from time to time, and in eight or ten years you may expect, and have reason to believe confidently, that that boy will never depart from these good ways. And, Mr. President, I ask for no further confirmation of what I have said than the lives of the young gentlemen and young ladies here to-day, who are graduates of our institutions. [Applause.]

On motion of MR. WILLIAMS, a question box was established for the use of the members of the convention.

REV. THOS. GALLAUDET, of New York: It is with great pleasure that I direct the attention of the convention to this painting of my beloved father, which has just been hung upon the wall. It is a very fair representation of him. It is painted by Miss Mary Peek, a teacher of art in the Illinois institution, at Jacksonville. It is a copy of a picture which is now in the National Deaf Mute College. Mr. Wright, of Hartford, was the artist there. The artist has taken a little license, but presents him very much as he appeared to us in our early life. You, of course, all know his history. He was the founder of the first school for deaf mutes in this country, in Hartford, Connecticut, April 17, 1817. He showed his deep interest in deaf mutes, how full his heart was of love for them, in proposing marriage to one of his first pupils, so that my mother was a deaf mute. She was honored by bringing up a family of eight children, of whom I am the oldest, and Dr. Gallaudet, there, of Washington, is the youngest.

I made up my mind when I began to get acquainted with young ladies, in college days, and so forth, that I would not marry a deaf mute, myself. I went to New York in the fall of 1843, at the invitation of Dr. Peet's father, to become a teacher there, and my wife very fully converted me from the error of my ways; and, therefore, I have a deaf mute wife as well as a deaf mute mother. [Applause.]

The Committee on Order of Business reported, recommending that two sessions of the convention be held daily, from nine to twelve o'clock A. M., and from two to five o'clock P. M., and, if necessary, a third in the evening; that the entire morning be devoted exclu-

sively to normal work, and afternoon session to the general work of the convention; that there be a general "query box" placed in a convenient position in which all questions relating to our work may be placed and referred to the proper divisions; that Mr. Ely, Chairman of the Normal Departments, have charge of the work of each morning and report line of work day by day; that no paper exceed twenty minutes and no speech ten minutes; that a Sunday Conference be held at three o'clock, at which moral and religious subjects pertaining to our work may be discussed.

The following order of business will be observed:

A. M. First—Prayer.

Second—Normal Department.

P. M. First—Reading of Minutes.

Second—Reports of Committees.

Third—Reading of Communications.

Fourth—Reading of Papers.

Fifth—Discussion.

Sixth—Miscellaneous Business.

The report was adopted.

The Committee on Enrollment and Credentials reported the list of delegates present, as follows:

1. AMERICAN ASYLUM.—Job Williams, Principal; Dr. G. O. Fay, Abel S. Clarke, Miss Ida V. Hammond.

Honorary Members.—Miss Clara D. Capron, Mrs. A. B. Hendryx, Miss Alice A. Hendryx.

2. ARKANSAS.—F. D. Clark, Principal.

3. CALIFORNIA.—Warring Wilkinson, Principal; G. B. Goodall, C. T. Wilkinson, T. d' Estrella, Henry Frank, Douglas Tilden, Miss A. B. Carter, Miss M. A. Dutch, Miss K. A. Crandall, Miss M. Day.

Honorary Members.—Hon. George Stoneman, Governor of California; Hon. Geo. E. Whitney, Hon. A. L. Chandler, Hon. E. W. Playter, Hon. R. A. Redman, Hon. Geo. H. Rogers, H. A. Palmer, T. A. Lord, W. L. Prather, Dr. I. E. Nicholson, Hon. W. T. Welcker, Superintendent of Public Instruction, Prof. Geo. Howison, Prof. John Le Conte, Prof. Joseph Le Conte, Prof. W. B. Rising, Prof. Martin Kellogg, Mrs. W. Wilkinson, Miss Maud Wilkinson, Mrs. Geo. Stoneman, Mrs. H. B. Willard, Miss J. Osgood, Miss M. J. Wiseman, Miss E. Shaw, Miss M. E. Wright, Theo. Grady, Ira P. Rankin, Rev. J. A. Benton, D.D., Rev. B. F. Crary, D.D., Rev. G. A. Easton, D.D., D. D. Shattuck, T. L. Barker, Dr. J. S. Eastman, Dr. W. A. Grover, Oscar Krutmajer, of Stockholm, Miss Noyes, of China, C. S. Perry, Mrs. C. S. Perry.

4. CHICAGO DAY SCHOOL.—Mrs. P. A. Emory, Miss Grace D. Emory, Mrs. Mary A. Woodworth.

5. CHURCH MISSIONS.—Rev. Thomas Gallaudet, of New York; Rev. A. W. Mann, of Ohio; Rev. Job Turner, of Virginia.

6. CLARKE INSTITUTION, MASSACHUSETTS.—Miss R. E. Sparrow.

Honorary Member.—Mrs. Sparrow.

7. COLORADO.—D. C. Dudley, Superintendent; H. M. Harbert.

Honorary Member.—Mrs. C. C. Wynn.

8. DAKOTA.—James Simpson, Principal.

Honorary Member.—Mrs. James Simpson.

9. DESERET INSTITUTION, UTAH.—Henry White, Principal.

Honorary Members.—Dr. J. R. Park, J. B. Toronto.

10. GEORGIA.—W. O. Conner, Principal.

Honorary Members.—Hon. J. S. Stewart, J. S. Stewart, Jr.

11. ILLINOIS.—Philip G. Gillett, Superintendent; Mrs. A. J. Griffiths, Miss Mary Selby, J. A. Kennedy, Miss Elinor Patten, Miss Mary Peek, Miss Fannie Wait, D. W. George, Miss Alma Gillett, Miss C. Luttrell, Miss C. Gunn, Miss F. Henderson, George Wing, Miss Lou Gallaher, T. J. Rogers, Philip Hasenstaub.

Honorary Members.—Mrs. P. G. Gillett, Mrs. C. Bull, C. P. Gillett, P. F. Gillett, Miss J. V. Gillett, Hon. M. A. Cushing, Mrs. Imogene Cushing, Miss Annabel Powers, A. E. Ayers, Miss Grace Ayers, Miss Miriam Morrison, Miss Jane Russel.

12. INDIANA.—Dr. W. H. Latham, Wm. A. Caldwell.

Honorary Members.—Mrs. W. H. Latham, Mrs. Wm. A. Caldwell.

13. IOWA.—H. C. Hammond, Superintendent; G. L. Wykoff, Superintendent elect; D. W. McDermid, C. Spruit.
Honorary Members.—Miss Sarah E. Wright, Mrs. H. C. Hammond, Matron; Louis Weinstein.
14. KANSAS.—S. T. Walker, Superintendent; R. T. Thompson, E. W. Bowles, Miss Effie Johnson, Miss Jessie Eggleston, Frank Metcalf, Edward P. Gale, Miss Addie McClure.
Honorary Member.—Mrs. S. T. Walker.
15. KENDALL SCHOOL, WASHINGTON, D. C.—James Denison, Principal; T. A. Kiesel.
16. KENTUCKY.—W. K. Argo, Principal; Mrs. Ella Warren, Miss Jennie Lee.
Honorary Members.—Mrs. Clara Lee, Allie Lee, Miss Zoe Welch, Miss Ella Warren.
17. MAINE.—Miss Ellen L. Barton, Principal of Portland School for the Deaf; Miss M. H. True.
Honorary Member.—Mrs. Frances A. Strickland.
18. MARYLAND.—C. W. Ely, Principal; G. W. Veditz, Miss M. R. Harris, Miss K. H. Fish.
Honorary Member.—H. J. Gill.
19. MICHIGAN.—M. T. Gass, Superintendent; Thomas L. Brown, Willis Hubbard.
Honorary Members.—Miss Phebe Wright, Miss Adelaide Birdsall.
20. MILWAUKEE DAY SCHOOL, WISCONSIN.—
Honorary Member.—Mrs. Ann E. Chapman.
21. MINNESOTA.—J. L. Noyes, Superintendent; Miss Mary E. Griffin, J. L. Smith.
Honorary Members.—Mrs. J. L. Noyes, Hon. Geo. E. Skinner, Mrs. Geo. E. Skinner.
22. MISSOURI.—W. S. Marshall, Assistant Superintendent; Mrs. W. S. Marshall, H. C. English, Miss D. A. Grimmer, D. C. McCue, Mrs. D. C. McCue, Miss E. Reed, Miss Mary Harris, J. N. Tate.
Honorary Members.—Mrs. H. C. English, Miss M. Provines, Miss Josie Provines, Mrs. Hughes, W. N. Marshall, Miss Nellie Wheeler.
23. NATIONAL DEAF MUTE COLLEGE, WASHINGTON, D. C.—E. M. Gallaudet, LL.D., President; Samuel Porter, Edward A. Fay, John W. Chickering, Jr., John B. Hotchkiss, John J. Chickering, Arthur D. Bryant.
Honorary Members.—Margaret Allen, Mrs. E. A. Fay, Miss K. F. Gallaudet, Denison Gallaudet, Edson Gallaudet, John A. Jameson, Jr.
24. NEBRASKA.—J. A. Gillespie, Principal; J. N. McClure, Miss Minnie S. Cox, Miss Frankie Saunders.
25. NEW YORK.—Dr. Isaac Lewis Peet, Principal; Mme. Le Prince, G. C. W. Gamage.
Honorary Members.—Mrs. I. L. Peet, Hon. Erastus Brooks, Miss Bertha Brooks, Miss Gertrude Walter, Miss Caroline Park, Mrs. L. C. Searing, Rev. Dr. Storrs.
26. NEW YORK (WEST).—Z. F. Westervelt, Principal; Miss Penelope Reed, Miss Lucy McMaster.
Honorary Members.—Miss Caroline Perkins, Miss Angie Powell.
27. NEW YORK (INSTITUTE FOR THE IMPROVED INSTRUCTION).—Dwight L. Elmendorf.
28. NEW YORK (LE COULTEUX).—Sister Mary Ann, Principal; Sister Mary Dosetheus; Miss Margaret Staunton.
Honorary Members.—Rev. P. S. Dunne, Rev. Dr. M. Faune, Rev. J. D. Biden.
29. NEW JERSEY.—Weston Jenkins, Principal.
Honorary Member.—Mrs. W. Jenkins.
30. NORTH CAROLINA.—W. J. Young, Principal; E. McK. Goodwin, Miss L. B. Turlington.
31. OHIO.—Amasa Pratt, Superintendent; Geo. W. Halse, Miss Mary B. Straw, Miss Mary C. Bierce, Miss Carrie M. Feasly, Miss G. Camp, Miss Anna Frost.
Honorary Members.—Mrs. G. W. Halse, Hon. J. S. Hare, Mrs. A. W. Mann.
32. ONTARIO, CANADA.—R. Mathison, Superintendent.
Honorary Members.—Byron Nicholson, T. S. Carman.
33. OREGON.—P. S. Knight, Superintendent; Miss —. Woodmas, Miss Elizabeth Early.
Honorary Member.—Mr. Brewer.
34. PENNSYLVANIA.—A. L. E. Cronter, Principal; F. W. Booth, Geo. L. Weed, Miss Laura De L. Richards, Miss Julia A. Foley.
Honorary Member.—Miss Mary A. Silloway.
35. RHODE ISLAND.—Miss Anna M. Black, Principal.
36. SOUTH CAROLINA.—S. S. Rogers.
37. ST. LOUIS DAY SCHOOL.—Delos A. Simpson, Principal.
38. TENNESSEE.—Thomas L. Moses, Principal; L. A. Houghton, Miss Bettie Davis, Miss —. Jackson.
39. TEXAS.—Rev. W. Shapard, Superintendent; I. W. Blattner, Principal; C. W. Simpson, Miss Lulu A. Jones, Miss Ola L. Wright, Miss Emma Shapard, Wm. H. Lacy.
Honorary Members.—Miss —. Shapard, Miss Sarah Walton.

40. WASHINGTON TERRITORY.—W. D. McFarland, Director; Geo. Layton. *Honorary Members*.—Miss E. Van N. Young, Miss Clarissa McFarland.

41. WESTERN PENNSYLVANIA.—Miss J. A. Shrom.

42. WESTERN VIRGINIA.—E. L. Chapin.

43. WISCONSIN.—Miss Mary M. Jameson, Miss Alice Turley. *Honorary Member*.—J. A. Jameson.

The convention here took a recess to two o'clock P. M.

AFTERNOON SESSION.

PRESIDENT GILLETT, in the chair, called the convention to order, and introduced the Hon. George Stoneman, the Governor of the State of California.

GOVERNOR STONEMAN: As Executive of the Commonwealth of California, I take very great pleasure in performing the duties of host, which have been assigned me on this pleasant and profitable occasion.

We hope you will make yourselves at home during your stay with us, and help yourselves to anything that comes in your way. If you desire a big squash or melon, or mammoth beet or turnip or cabbage, you will have but to say the word. Just put it in your trunk and take it home with you. We can show you fields of waving grain, measured by the thousands of acres, and fruits of every description measured by the carload. We can point with pride to the fastest horses, and some of the finest men and women in the land, east or west. You will find that the people of California are never satisfied unless their efforts are equal to any and every occasion.

I had almost forgotten to mention the greatest of all the great things for which California is noted the world over, and that is, her climate. When the stranger comes among us and is inclined to grumble and find fault with what he sees, hears, and feels, we stuff him with climate until the poor fellow is forced to cry out "Enough!"

There is one thing we have of which we all feel justly proud, and that is our eleemosynary institutions; and of them all, perhaps the Deaf and Dumb and the Blind Asylum is one of the most conspicuous. Located in the center of a dense population, and accessible to the whole people of the State, convenient to the sources of supply, surrounded by the beauties of nature—which, alas, the poor blind are unable to see and appreciate—with a corps of instructors not surpassed by any other like institution, with every improvement, both mental and mechanical, of modern times, it ought to be, and we claim it is, a model, and one which deserves the fostering care of a generous and appreciative public.

As an adjunct to this institution, we have another at Santa Clara, for the feeble-minded, a most eminently deserving charity, both of which have enlisted my sympathies and all the aid and countenance I have been able to give them.

You have done us the honor and the credit to come thousands of miles to see us, to ascertain who and what we are, and what we are doing. We hope before you return to your eastern homes that you will have the time to visit all our eleemosynary institutions and show us wherein we are behindhand, as compared with similar charities in the older States which you represent.

It has become a feature of the times to hold interstate and interna-

tional conventions to discuss principles and practices for the alleviation of suffering and the benefit of mankind. The world is fast becoming one great family, and each generation is better than its predecessor; and it behooves each one of us to contribute what may be in his or her power to advance the general good of all. [Applause.]

HON. MR. BROOKS: Mr. Governor of the State of California and ladies and gentlemen: By the request of the President of this convention it is my pleasure, as it is my privilege, to respond to the welcome which we have received from the Chief Magistrate of this State. He reminded us in his last sentence that throughout the world we were of one family. And that recalls the sentiment of Holy Writ which says, "God has made of one blood all the nations of the earth to dwell upon the face of it." We are indeed one family; more than ever in the United States of one mind, one purpose, and one future, in unity, in prosperity, and in activity. [Applause.]

The Governor has been pleased to remind us that in California they are a restless people. I have never seen an American-born citizen who was not a restless mortal, moving onward and forward all the time; beginning as we all know in the early history of the country with perhaps three millions of people, and to-day numbering more than fifty-five millions of people. In my boyhood the center of the nation was in the State of Vermont; to-day it is west of the City of Cincinnati. A few years hence who can tell where it will be?

A great thought is that in the State where I was born, the State of Maine, more than three thousand five hundred miles distant, a man may travel all this way and reach the Pacific, and yet geographically can travel as many more miles before he reaches the end of the nation. No fact could possibly give a grander or a larger idea of the extent of the country than a statement like this.

In my earlier life, as a resident of the City of Washington, I knew something of the beginning of this State. I remember the time when Senator Foote, of Mississippi, said upon the floor of the Senate Chamber, near the close of a session, that if his party would stand by him he could speak thirty-six consecutive hours and keep California out of the Union by the expiration of that short period of time. And he commenced that work; and he was the most extraordinary man for lung power and words that I have ever seen or heard before or since. And if his party had stood by him he would have kept California out of the Union for that session of Congress by talking the bill to death for her admission to the Union. What a change since then! Those were in the great days of Clay of Kentucky, of Webster of Massachusetts, Calhoun of South Carolina, Poindexter of Mississippi, and Sprague of Maine; of a brilliant class of men not one of whom is living to-day. No man is living to-day who was in the Senate of 1835-6, and only five or six of those who represented the nation at that time in the House of Representatives. The population has increased as we have seen it until this great State, so wonderful in its attraction, has drawn us here by the magnetism of those who represent it, by the gifts of Providence in the wonderful produce of the soil.

The thought which impresses me most strongly at this time, is that in all of the divisions of opinion in the past, in those memorable times which separated the States of the Union one from the other, when you, sir, in the discharge of your duty, was upon the side of the country, and some, unwisely, were not upon the side of the country,

we have seen the old spirit of dismemberment, the old spirit of disorganization, changing into a manly and womanly love for the country and the whole country [applause]; not one star polluted, not one stripe erased; bearing for its motto no such miserable question as "What is all this worth?" but everywhere, on all its ample folds, wherever it shall float, upon the sea or upon the land, those other words dear to every American heart, "Liberty and union, one and inseparable, now and forever." [Applause.]

Sir, there are distinctions in States and peoples. In the providence of God it is your pleasure to preside over a State, gifted as you have said in its climate so that it is distinct from almost every other State in the Union. And if I am permitted for a moment to draw a parallel between this State and another, between the rock-bound coast where I was born and the Golden Gate in sight of all of us here, I would say it is simply the distinction that, as States we are distinct like the billows, but one, like the sea [applause]; and that is about all the distinction there is between us.

Sir, I beg leave, in behalf of all these people you see before you, representing the deaf and dumb, and some of the blind institutions, to thank you most cordially for the welcome you have given us here to-day. It will be a pleasant memory in our future lives. [Applause.] We are thankful for two things especially; for the domestic welcome which we have received at the hands of those who are permitted the great task, and I hope in a certain sense the privilege of entertaining so many people from distant parts of the Union, and for your honor's welcome. We are glad to be here; and as we leave this welcome place for our own homes, so many miles away, we shall bear witness to the cordial welcome of the Executive of the State and the constituents whom he represents. [Applause.]

THE CHAIRMAN: I have now the pleasure of introducing to you the President of the Board of Trustees of this institution, Hon. R. A. Redman.

JUDGE REDMAN: Ladies and gentlemen, the chief executive officer of the State, Governor Stoneman, having extended to you the right hand of fellowship on behalf of our fellow citizens at large, it becomes my agreeable duty to receive you on behalf of the Board of Directors of the Deaf and Dumb Asylum of the State of California.

I therefore extend to you our most cordial greeting, and welcome you as the friends of progressive education, devoted to the welfare of those whose silent tongues, though they speak not, appeal most eloquently to the tenderest affections and earnest considerations.

I trust that your convention may be a success, and that your fondest anticipations may be fully realized, and also that you will show to the public what vast improvements have been made in teaching the deaf and dumb. I might suggest here, without impropriety, that there seems to be a general misapprehension in the minds of most people, as to the nature, character, and importance of these institutions, the general impression being that they are a sort of charity, because, perhaps, the name of "asylum" is often employed. Our institute is called an "asylum," giving the impression that the inmates are pensioners upon the public bounty. This is a great mistake, and I seize upon the opportunity of correcting it at the expense, possibly, of a digression; but I do so with the hope of attracting public attention to your proceedings as they shall appear in the daily press, as you proceed with your work. While it is quite true that

many of these institutions are called asylums, the fact, however, is that they are purely educational, as much so as are the high schools, the normal schools, or the State University itself. [Applause.] Practically speaking, they are a part of that principle which recognizes the doctrine that it is the right and duty of organized society to provide a system of public education for all those who desire to avail themselves of it; and the matter of the student being deaf and dumb cuts no other figure than merely to determine as to which of these State institutions he shall be sent. We all know, and it is a source of much consolation, that deaf mutes are susceptible of the highest degree of scholarship; that they can become proficient in most of the arts and sciences, and skillful in many mechanical trades; and that their lives may be rendered as contented and happy as are those who can hear.

Now, I do not mean to criticise nor underrate the general public intelligence, in what I say, but I do find, in general conversation, that very few persons, outside of those more or less directly interested, have ever heard of the subject of teaching the mutes to speak. I refer to "articulation," as you term it in the schools. Not long since a gentleman called here and met one of our pupils near the gate (a colored boy). The visitor knew the boy very well, and knew that he had been deaf and dumb from infancy. The pupil, supposing that the visitor desired to see our Principal, politely stepped forward and said, in his articulative, monotonous tone, "Mr. Wilkinson has gone to Oakland." You may imagine the astonishment. The gentleman admitted to me that his "hair stood straight up," but he denied that he sprang into his buggy and laid on the whip. He thought that a miracle had taken place [applause] in his immediate presence, and that he smelled sulphur. So will many people be surprised when they see this little story in print, but may not be so badly frightened, being at a safer distance.

In conclusion, allow me, on behalf of the Directors, to place you in the care of our worthy Principal, Professor Wilkinson, who is a host within himself. [Applause.] Should you get hungry, or even thirsty, just speak to him in the sign language; he will understand your wishes.

I wish you all much personal happiness. We extend to you the freedom of the institute and its surroundings. We bid you thrice welcome, not only as guests who are worthy of our best efforts to entertain, but as guests whose presence here upon the present important occasion confers upon our institution and State an honorable distinction which we fully realize and appreciate, and we unite with you in the hope that much good may result from your councils. [Applause.]

THE CHAIRMAN: I will now introduce to the convention Professor R. Mathison, of Belleville, Canada.

MR. MATHISON: Mr. Chairman, Your Excellency, The President of the Board of Trustees, ladies and gentlemen: I feel a little lonely over here among so many Americans. But I have been doing my best ever since I left Chicago to get acquainted with every one that was coming to this convention, and more especially with the ladies. [Laughter.]

I have heard in the past a great deal about your glorious climate and your glorious country, and I think I have heard a good deal about it to-day. This morning it was nothing but the American Union,

no word about Canada. I know this is a great country; it is one of vast extent. But you must remember, and it will be well if you did not forget the fact, that we have more square miles in our British possessions than you have in the United States, including Alaska. [Laughter.] Your country is vast; and your agricultural resources are vast, too. There is one thing that we cannot vie with you in, though—that is the great American desert. [Laughter.] We have no deserts in our country, so you are just one ahead there. [Laughter.]

Your institution here is, I think, all that our fancy pictured it. It seems to be equipped with everything that is necessary for the education of the deaf and dumb and the blind. I might say that in Canada our institution is not quite as large as this; in fact, that we have not so many institutions in Canada as you have in the United States. So you are ahead of us there again. I am very sorry indeed that there is a necessity for so many institutions anywhere. As there is a necessity, however, I do not think that the education of the deaf and dumb could be committed to better hands than those who are here. I have conversed with a great many on the train, and they all seem imbued with one spirit—that is, what is the best method of advancing the interests of those committed to our care?

In Canada we have a number of institutions. In Ontario, the one which I have the honor to represent in this convention, we have two hundred and forty-five pupils and thirteen teachers, and we are very well equipped. The money that is required is freely given for the education of the deaf, dumb, and blind. The education of speaking children there is attended to, and the deaf and dumb and the blind are not forgotten. Our educational system in Ontario is equal to any in the world, not excepting the United States; and our children may go from the primary school to the university, and all free. Our institution for the education of the deaf and dumb is not free theoretically, but it is practically. We get them in from all quarters, and we are glad to get them; we are pleased, and, indeed, we want all of the work of that kind that there is to do in the country. And our other institutions for those afflicted are equal to those of any State on this side that I have seen. The asylums for the insane are models of the kind; the reformatories are models; the industrial schools are in good hands, and without what I have heard so much of in this country, bullying and politics. Everything there in connection with educational institutions is entirely separated from political matters. [Applause.] Persons in positions there are selected for their fitness. You will excuse me if I make this remark. [Laughter and applause.] We are very well known as a modest people. [Laughter.] I have had occasion to remark that many times during the trip, and to tell a number of my friends who have asked me what we did in Canada, that our modesty, in fact, has kept us back.

Your country here has advanced with rapid strides. You have fifty-five millions, while we have not quite so many. We have a country though large enough to contain as many millions as you have, and I presume that in the future we shall have quite as many. You have many railroads here, and very extensive ones, and very long lines. We have had occasion to use some of them. You have narrow and broad gauge roads. In our country we have discarded narrow gauge roads; they are not fast enough for us. We have a railway much longer than you have in the United States. Count us one ahead there, please. I am very glad indeed to be with you. As I said

before, I did feel a little lonely at first; but I do not feel so lonely now. Before I leave this country I expect to make the acquaintance of every one connected with this convention. If I do not, it will not be my fault. I appropriated to myself a part of the welcome which has been extended, although Canada was not mentioned. I suppose they did not think that little country up there amounted to much; but I appropriate the welcome which has been so cordially extended, and I shall do my very best to appropriate all of the privileges that come within my reach. [Laughter.]

I will correct one impression. You all seem to think that Canada is a very cold country, and you have been sympathizing with me on this account. Your sympathy is wasted in that direction, for we have just as much hot weather up there as you have sometimes. The cold there is not so intense as some of you seem to imagine. We live there and exist. I am a fair specimen of a Canadian. I was born there, and the cold does not shrivel me up as much as the heat does a great many of you down here. I did not intend to say anything when I commenced, and probably I have not. [Applause.] I am very glad indeed you have extended so hearty a welcome to me. I appreciate it, not as to me personally; but it is to the Empire, a member of which I am, and a part of which at one time you belonged to. [Laughter.] You thought that perhaps a little home rule would suit you best, and I think probably it has. You seem to be well able to take good care of yourselves; and you know every man likes a little home rule; that is, if his wife allows him to have it.

In conclusion, ladies and gentlemen, I hope we shall all be friends; that the dividing line will not interfere with us in the work which we have come out here to do, and the work which we are all pretty well paid for. [Applause.]

I think the devotion of this band of ladies and gentlemen cannot be questioned, when they will brave the dangers of that American desert and of those mountains to come here to meet in California. I might say that I did not think I would come at first, and wrote to Dr. Gillett and said that the distance was too great and the expense was too great. The distance is very far indeed, and the expense is great, too; but then we have not got as much money in Canada as you have in the United States. But I changed my mind. You know a wise man can change his mind. I changed mine, and am very well contented. I would not have lost the trip for anything. I could not possibly see such mountains in our country as we have passed over in coming to this place; and we have not so many of them, and they are not so high, and so are not so sterile in our country. [Applause.]

However, variety is the spice of life, and we have had an exceedingly great amount of variety all along the route. We have had good meals and bad meals, good water and bad water, good lager and bad lager, and everything else good and bad, and have come here to a land flowing with milk and honey, with peaches and blackberries, which are my especial delight; and I have heard many say the same thing. If you treat the Canada delegation the same for the next week as you have in the past twenty-four hours, I think I will be inclined to stay with you a little while. But when I get back I shall say I think with the quotation,

"Breathes there a man with soul so dead,
Who never to himself has said:
'This is my own, my native land.'"

[Applause.]

THE CHAIRMAN: I understand there is a gentleman in the house, a very firm and fast friend of this institution, Senator Whitney, whom I will ask to come forward and address the convention.

SENATOR WHITNEY: This is certainly a surprise to me, to be called upon to say anything to you on this occasion. I had no intimation of it. If I had I should have felt it to be worth all my best endeavors to say something to those who have come so far, and under such circumstances of discomfort as have been detailed to us by the gentleman who last took his seat, to give us this pleasant visit. I am sure that we in California appreciate it, and the members of this institution and all the people of the State will strive to find a place in our hearts large enough to take you all in, and keep you there as long as you shall remain in the State, and even then to hope that you may again return to us at some future time. [Applause.]

Allusion has been made to the fact that I have heretofore been a friend of the institution. I am only sorry to say that my capacities in that particular have not been equal to the heart with which I view all institutions of this kind. And as I come here, year after year, at the exhibitions of this institution, and see the evidences of intelligence of those who are shorn, in part, of those powers which a kind Providence has endowed the most of us with, exhibit, I feel almost as though it were a blessing even to be shorn of the gift of speech. There is a grace, a beauty of intelligence, a charm of action, something which seems to attract, which I find in the schools of these institutions, which I do not find in any other place. It does seem to me, as I observe their progress from year to year, that their means of communication are as perfect and certainly most graceful and charming. So I have often thought whether or not it would not be a good idea if we had, in all of our common schools, a department where this beautiful sign language should be taught, where people should be taught to understand and appreciate the eloquence of the eye, and the grace of motion which you acquire here much more than we do, who are, as we say, blessed with other and further powers. At any rate, nature compensates for all. And everything that I have been able to do has been nothing to what was in my heart at all times to do. I think you will find evidences of the generosity of the people of California in this magnificent institution. It is not too much to say that we are proud of it. We are proud of him who stands as its head [great applause], and who, for all of these long years, has devoted himself to building it up, with a devotion which is as rare as it is thorough and efficient.

Ladies and gentlemen, I did not think to say anything, and I have said more than I intended. I can only say that I thank you for an opportunity of looking you all in the face and of saying these few words of welcome. [Applause.]

THE CHAIRMAN: In the year 1863 I was visiting the New York Institution for the Deaf and Dumb, and Professor Wilkinson was then one of the instructors of that institution. I remember we were very much stirred up at that time by the events which were transpiring around us, and further at the south, and, getting up quite early one morning, I saw Professor Wilkinson, with the "New York Tribune" in his hand, running up and down the hall, crying, "Where is Stoneman? Where is Stoneman?"—almost wild. He is the brother over here who was after Stoneman just then, and I want Mr. Connor to come and tell us all about that. [Laughter and applause.]

MR. W. O. CONNOR, of Georgia: About that time I happened to be down in Macon, Georgia, with a wound that I had received. We heard of General Stoneman's approach to Macon, and it appeared as if he was going to come in there, and they called upon us hospital rats to muster, and while I was not after him, yet I was armed and ready to go, if somebody else had not caught him first.

However, about one year after that, up at Salisbury, North Carolina, I was present again, and he just reversed the thing, and caught me. I belonged to a battalion of artillery, and he captured it. It is a great pleasure and privilege for me to be here and to be caught again by the General and his Californians.

I never attempted to make a speech in my life. As I said, I am very glad to be here, and I think we all are. I have enjoyed my trip very much, indeed, so far, and expect to enjoy it, and expect to hold on to it as one of the pleasantest memories of my life. [Applause.]

THE CHAIRMAN: One of the great acquisitions that the State of California has received from the East is Professor Warring Wilkinson, and the man who discovered him in New York is here this afternoon, and while we do not bear any malice against him and the Californians for taking Professor Wilkinson away, we should like him to give you an account of himself, at any rate. That gentleman is Mr. Ira P. Rankin, of this State, I understand.

MR. IRA P. RANKIN: Mr. President, ladies, and gentlemen: I did not come here to make a speech. A few moments ago it was intimated to me that, as one of the former Directors of this institution, I might be requested to say a few words.

It is many years since I have had any connection with this institution, but my recollections of service in connection with it are very agreeable to me. I look back upon them with a good deal of complacency and satisfaction.

A Board of five gentlemen, three of whom, I think, have passed away, and one of whom—Professor Benton—I see here this afternoon, were appointed by the State Legislature to take charge of the property which had fallen into the hands of the State at the Mission. We were authorized to sell that property the best way we could, and select at our pleasure, wherever we could find it in the State, a site for the new institution, and use the avails of that property for buying land and building a new institution. We sold it for \$35,000, and after we had bought this land we had something like \$85,000 to erect and establish an institution.

I recollect that our Commission went out in the very midst of the cherry harvest, and we were called to various parts of the State—to Santa Clara, Martinez, and other places. Wherever we went we were taken, the first thing, into the cherry orchards, and invariably helped ourselves to eat as delicious cherries as can be found anywhere in the world. This is the result of our search. We came to this place. There were no cherries here; no trees or shrubs in sight in all this location; but with an imaginative eye, I suppose, we saw what this place was capable of becoming, and we secured this site—in the first place forty acres of ground here, and afterwards eighty acres, running from the road to the hills, making a hundred and twenty acres—and built the institution upon, I think, the very site of this building—a stone building—the whole institution being at that time embraced within those walls only, and we had great satisfaction in carrying through the enterprise; and, Mr. Governor, I can say this: You will

appreciate the kindness with which we were treated. We spent a great deal more money than we were authorized to do by law—we were prohibited expending any more money than arose from the proceeds of the sale of that land. When we came to contract for a suitable building we found that it would cost about \$125,000, while we had but \$50,000, and it would be two years before the Legislature would meet again. We saw that the money we had to use was entirely inadequate. We trusted to our own judgment, and the confidence which we had in the authorities of the State, to go on and make our contracts, only subject to the condition that when we had expended our money the contractors were bound to stop. But when the Legislature came together, in the mutations of politics, the Legislature at that time had become a Democratic Legislature, yet they gave us every dollar of money we asked for. [Applause.] They sent their committees here to investigate and examine into our doings, and I think Professor Wilkinson, who was here, will agree with me in saying that at no point did they criticise any expenditure or contract we had made; and I believe they approved everything, which says a good deal, either for the capacity, integrity, or plausibility of the Board of Directors who had the business in charge. At all events, they found no fault with us.

But I think the greatest thing we did was the very thing, Mr. Chairman, which you referred to—sending East about that time and getting Professor Wilkinson out here to take charge of this institution. [Applause.]

Of course we knew nothing of this matter of instructing the deaf and dumb and the blind, technically or professionally. We were not experts. But so far as our judgment went, he was the man pre-eminently qualified for Principal of such an institution. [Applause.] He has so commended himself, from that time to this, to the people of the State, to the authorities, to the Legislature and the executive officers of the State, that when he has gone to the Legislature at any time to ask for appropriations for additional buildings, additional facilities of any kind, he has been successful. I cannot say, positively, that his success is entirely owing to the confidence that the Legislature has in every case, in his integrity and ability—it may be that his eloquence is so winning and persuasive that he has prevailed upon them and gained their sympathies, against their superior judgment. I do not know how that is, but, somehow or other, when he has gone up there, and particularly when he has taken Mrs. Wilkinson with him, I believe he has never, from the first, failed to get anything he has asked for. [Laughter and applause.] And you see the result in this institution as it stands here to-day, a beautiful institution, well equipped, upon a site which, it seems to me, could hardly be excelled if you look the world over.

I am trembling a little for Professor Wilkinson. He has been dealing for a good many years past with people in his plausible way, who do not know very much about the business that he is supervising. But he now has a committee of experts here to deal with, and it is very possible that they may find some flaws in his system or in his mode somewhere, of carrying on this institution, which we have never discovered. If that should be the case, I pity and sympathize with him. But I hope he will pass scathless through even such an investigation.

I am sure that I, in common with all the citizens of California,

welcome very cordially to our State and city the representatives of these institutions, and I hope your time will be passed very pleasantly and profitably here, and that you may find, out here in California, on this outskirts of civilization, as it is sometimes called, some new ideas that have been evolved here, which you can carry home to the institutions with which you are connected on the other side of the continent.

THE CHAIRMAN: We have heard from Canada, from the Atlantic seaboard, from the sunny South, and I will now call upon Hon. George E. Skinner, of Minnesota.

MR. SKINNER: Ladies and gentlemen, I might begin my remarks by saying that I am a '49er, coming to the State of California in 1849. Of course you may imagine my surprise at the improvements, and if my remarks are short it is because of the great surprise I have experienced in seeing the improvements that have been made in this time. I have been very much interested in the remarks that have been made, not only by the Chairman of the Board of Directors, but also by the last gentleman who has had the floor. It is the practical effect and business effect of these institutions which I, in a few remarks, propose to refer to.

In the first place, I agree with the gentleman, the President of the Board of Directors of this institution, that these are not charitable institutions; that they are institutions of learning; that every deaf, dumb, and blind child in the United States is as much entitled to an education as your child or mine, in any institution in the land. [Applause.] I trust and hope that every State in this Union where these institutions are designated as "asylums," will change it, as we have in Minnesota, to "educational institutions." [Applause.]

There have been some remarks made here about the manner of obtaining money to carry on these institutions. Of course it requires a vast amount of money. I have no doubt there are millions of dollars invested in these institutions, and their current expenses require a vast amount of money. But it only requires that the people of every State should have confidence in the Directors. When they have that, you will, in my opinion, receive all the money you require. And if, through the application of your Superintendents you do not succeed, I will tell you one process that never fails; we have had a little experience of that in Minnesota. We wanted thousands and thousands of dollars there, at one time, to build up the institution. We had made application to the Legislature, and of course those members coming in did not fully realize the position we were in. It was finally suggested, after the institution had been carried on for a few years, that we should invite the Legislature to an exhibition, and that after that our Superintendent, Mr. Noyes, would take charge of the balance of it. They came down there in a body, and the pupils went through their exercises, and the exhibition I remember quite well. Mr. Noyes invited a young lady who was to graduate at that time, upon the stage, to say the Lord's Prayer in the sign language, which she did, before that assembled body of legislators. I had a little curiosity to see the effect which that had upon those men, and I saw tears rolling from eyes which were unused to weeping. The result of that was: "How much money do you want, name the amount?" and the difficulty with us was to persuade them not to give too much, and from that day to this we have never asked the State of Minnesota for an appropriation to carry on not only build-

ings, but the current expenses of that institution, but what it has been freely and gracefully granted by them. [Applause.]

THE CHAIRMAN: We will now hear from Dr. Isaac L. Peet, a great educator, and one of the oldest in this work.

DR. PEET: Mr. President, ladies and gentlemen, fellow workers in a great cause: I feel that my chief claim to being called upon upon this occasion, is the special relation I hold to the Principal of this institution, who, for many years, was associated with me in the instruction of the deaf and dumb in the City of New York. When he first came to the institution, I had been in the work fifteen years. He, at that time, was a recent graduate of Union College. He was recommended to my father, who was then the Principal of the New York institution, by one of the best educators of the deaf and dumb we have ever had in this country, Mr. David D. Bartlett. To look at Mr. Bartlett and then to look upon Mr. Wilkinson, you would say that the same blood must run in their veins, and so it did. Mr. Bartlett conferred a great favor upon the cause of deaf mute education when he recommended Mr. Wilkinson to the New York institution, without the knowledge, on Mr. Wilkinson's part, and with the rare insight which Mr. Bartlett brought to the benefit of our cause. For ten years Mr. Wilkinson was associated with me in the New York institution. He acquired the language of signs in a remarkably short time; he was full of enthusiasm, full of devotion to his work, and manifested every quality which makes an admirable teacher of the deaf and dumb, or in fact, an admirable teacher of any one. He had also in his veins the blood of that celebrated educator, Mr. Charles Bartlett, who founded the Collegiate Institute, at Poughkeepsie, New York, where he had his preparatory education, and many of those methods which he has introduced into the management of this institution.

Mr. Wilkinson gained the affection of every one connected with the New York institution. We all loved him, and I never had a severer blow than when we were obliged to part with him, to send him to the Pacific Coast, to the great State of California. But we felt that we ought not to keep him when you needed him. I will state, also, in connection with his residence in New York, that while he was there, his literary qualities were acknowledged on every hand; he was a frequent contributor to our best magazines and papers; he was a member of that very exclusive club, the New York Century Club, which receives none but men of the highest intellectual position; and he was a friend of artists and of men of letters. He was not merely a teacher in our institution, but he was a member of the great fraternity of the most prominent literary men of the City of New York.

Such a man it was hard for us to part with; such a man we are glad that you have been able to secure, if we must lose him, and I congratulate this institution upon having secured his services, and I congratulate him upon the manner in which he has been sustained by the appreciative people of this great and glorious State. [Applause.]

THE CHAIRMAN: We would like to hear from Professor Kellogg, of the University.

PROFESSOR MARTIN KELLOGG, of California: I am very glad as a citizen of Berkeley, to welcome here, what we see present to-day. We of the University call ourselves pioneers in Berkeley. We came to

Berkeley and put up some large buildings, as it seemed to many of our friends, prematurely, but you learn to-day that we were not the first of its pioneers in education in this pleasant town; that this institution was planted before the State University. And so we gracefully yield precedence, and acknowledge that this institution for the deaf and dumb carries off the pioneer honors of our town. It is a town of educational privileges, and, in behalf of the University, I am glad to say that we have always recognized this as a sister institution.

There is, possibly, a little danger that some of the educators will forget, not that there is a charitable side of education, but that there is a side which looks to the beneficent as well as to the useful. I fully coincide with the speakers who have preceded me, that it is not necessary to consider work carried on in these walls as charitable work. I know that the opportunities here given are for the sake of giving a fair chance to those who seem by nature to have been denied their chance, and in the University, I take it, the opportunity to be given is that every boy and every girl who comes from the schools to us—for we take in girls as well as boys in the State University—should have a fair chance for the higher education. Here we are brought back to the fact that there is a beneficent side to education. For those who come here to educate these boys and girls, who by nature have been deprived of a part of our privileges, they certainly are called constantly to remember that there is a beneficent side of their work. And as we look upon their work, as we see their devotion, we feel that it calls for something more than mere business capacity, something more than mere shrewdness and a desire to get on in the world; that it calls rather for a benevolence of heart and disposition; that it calls for a willingness, if need be, to make sacrifices for the young and unfortunate; it calls for a lofty patriotism that would do something for the State in which you live, that would make those who are to be our successors better men and better women than those who are now upon the stage.

I say there is this side of education. And we are reminded, as we see these educators, as we see those who have come so far to confer about their work, who take such a lively interest in the work, and are ready to do so much for the benefit of those to whom nature has denied something; as we look upon this assemblage, we are reminded that education has its beneficent side; that the children may be taught signs is not the only thing. The object is not simply that men may go forth and make their living in the world that Dr. John Le Conte and Dr. Joseph Le Conte, *par nobile fratrum*, dwell here among us [great applause]; that they teach the sciences in the walls of our University. No such motive, certainly, actuates the distinguished professor who is the incumbent of the Mills' chair of moral and mental philosophy. He holds aloft a banner that is above all mere utility, above all that has to do only with the present, spurns this dull earth on which we tread, and would help us all to remember that we are to ascend to higher regions; that we are descendents of the skies, and that thither we shall return.

I welcome all of this assemblage to-day to this educational town, and I may, perhaps, in the absence of the official head of the institution of which I am a part, and who might speak more fitting words of welcome to-day, extend to you an invitation while you are here to walk through the grounds of the University, and on some afternoon

that you will find the library and art gallery open to your inspection, Monday, Wednesday, and Friday afternoons, and the buildings open, and also the collections in some other buildings. It is our vacation now, and most of the Faculty are scattered hither and thither, but we have some representatives here to-day, and if you desire to know how a professor of a University looks, do not look at me, but look at them. They, I am sure, will be glad to see you at the University, and let you know that we all feel an interest in our young State, that we all cherish these institutions, not only the one with which we are specially connected, but all of these institutions; and I believe we cherish them from high motives. We are not working simply to pass our lives there and get through with it, and "shuffle off this mortal coil" and be done with the world which so many seem now to despise, but we are trying to lay foundations on which, in the future, shall be built a noble edifice of education and of moral training that shall send its influence, not over this State only, but across the borders and out over the ocean, to all parts of the earth, that we may all help to do a little to make the world brighter and better for our being in it.

Ladies and gentlemen, glad as I am to see your faces to-day, I am filled with sorrow as I remember one face that is not here, a relative by marriage, whom we had hoped to greet upon this occasion and to entertain at our home. I know that some hearts here have sorrow over the untimely death of Richard Salter Storrs, of Hartford; and there is a near relative of his here to-day, from whom I wish we could hear—Rev. Henry M. Storrs, of New Jersey.

REV. DR. HENRY M. STORRS: Mr. President, ladies and gentlemen: I had arisen to leave the hall to take the carriage to go back to the city, and am under obligations to do so, to meet an engagement there. An occasion like this must arouse in the mind of any man occupied in public affairs, or connected with public institutions, the most generous sentiments, the highest appreciation. I did not know that this body was to assemble while I was upon the coast.

The reference to the lamented gentleman, a near relative, which has been made, touches chords of special sympathy, when I remember the long years of his constant devotion, and regarding those years as a sacrifice, that was fitly closed, in some sense, by the death that was the commencement, as we all understand, of a more splendid career beyond. You who are engaged in the same noble service, giving eyes to the blind, ears to the deaf, and tongues to the dumb, can record your names with his on the generous roll of service to man. You follow the grandest service of a man who passed through sacrifice and early death on his great career, and while we stand amidst the wrecks of men, to lift up those who are bowed down, we are strengthened by the thought that underneath all of our labor there is a mightier strength than ours, a more persistent will than ours, and that the sacrifices we make, and what we do, shall be taken up and borne forward through the illimitable ages before us, ripening on into grander things. We bear life, not as a sacrifice, but as a generous gift. Let us so carry it that when, by and by, blindness and deafness and dumbness shall all disappear, every eye see, every ear listen, and every tongue speak, we shall strike in with that general acclaim of praise that will be the song of the universe forever. I thank you for this generous hour which I have enjoyed in companionship with you; I thank you for this quiet listening; I thank you for your noble service to my race, our race, God's race on earth. [Applause.]

THE CHAIRMAN: I know you would not consider our exercises this afternoon complete if I should fail to call upon the President of the National Deaf Mute College, President Gallaudet, for a few remarks. [Applause.]

DR. GALLAUDET: Your Excellency, and President of the Board of Directors: At the beginning of the exercises this afternoon, my good friend, the President of the convention, spoke to me with signs, in this way [showing]; and I spoke to him thus [showing]; which, translated into a loud whisper, was: "Gallaudet, I want you to say something in a little while." I replied: "No, no, no; there is no use; there is no necessity for it." But the President has a way of insisting upon things, and of commanding people, that is very hard to get away from; and yet, sometimes, he puts people in an awful fix. If he had called me up about ten minutes after he gave me that warning, perhaps I should have been all right. I had a little speech turned over in my mind and worked a little into shape; but they have stolen it all away. My thunder is stolen. The climate of California, they have been all over that; the magnificence of the welcome has all been attended to. There is a great deal of feeling left; but there is not much more to say about it. I feel much like everybody else; but they have all said it for me, and left me nothing to say in my own behalf. My good friend, Mr. Wilkinson, he has been carried up, up, up, until I really cannot reach him. [Applause.] I am very fond of Mr. Wilkinson; and I had it all fixed to get a nice thing on him myself, but it was all taken away from me; it was all gone. Then I thought I should fall back upon a funny story; but, Mr. President, who can stand here and tell a funny story after those noble words that have just come to us from lips and brain that seem well nigh inspired. No, sir; I must preserve my funny story for another occasion; for the greeting of Dr. Storrs touches a chord that rings deeply in my own breast; and the words that I may say, and must say, I would be false to myself if I did not say more words to add in commendation and in the most fervent admiration for that man Richard Salter Storrs, who stood by my side, Mr. President, when the arduous duty was laid upon my young shoulders to organize the National Deaf Mute College at Washington. Who, but Richard Salter Storrs, stood by me as the first professor in that college at Washington, giving me the benefit of his broad and deep scholarship, his warm friendship, and his entire devotion to the cause of deaf mute education in its highest phase, to which he gave himself enthusiastically, until health gave way. And I can only say, Mr. President, that we who come here and accept these gracious welcomes from our friends, come and stand side by side with them who have reared this magnificent State, clothed in all its material prosperity, we come and stand with them on a higher plane than any that brings us to think of climate, or of welcome, or of comfort, or of enjoyment; we stand together, Mr. President, your Excellency, and Mr. President of the Board of Management of this institution, as men and women with a purpose in heart, with those who have a cause in which to labor, and for which, if need be, to shorten life by effort which tires the brain, and wearies the heart, and even sometimes paralyzes the hand. To this calling, which we here feel it no shame to say we dedicate our lives, we devote ourselves anew, and freshly inspired, your Excellency, by this noble greeting we have received here, to go forward

and do nobler and better things in the future for the cause of humanity, for the cause of education, than it has been permitted us to do in the past. [Applause.]

THE CHAIRMAN: We will now proceed with the order of exercises of the afternoon in the way of business. Is the report of the Business Committee ready?

MR. CROUTER, of Pennsylvania: It has been suggested that instead of the paper which was to have been read this afternoon, and which will be postponed until a later day, to be read in connection with a similar paper, that Mr. I. N. Tate, of Missouri, read a paper upon "How Can We Secure Better Schools for the Deaf?" to be followed, if there is time, by a paper by Mr. Jenkins, of New Jersey, upon "Aphasia in Reference to Deafness."

MR. I. N. TATE, of Missouri, then read the following paper:

HOW CAN WE SECURE A BETTER ATTENDANCE UPON SCHOOLS FOR THE DEAF.

It is a fact greatly to be lamented, that such a large number of deaf mute children are growing up entirely uneducated. It is said that at least one half of these "children of silence" are permitted to remain in the densest ignorance. There must be some cause for this; in fact, there are a number of causes.

It is universally admitted that there must be special methods used in order to educate the deaf; that they cannot be taught in the public schools of our country; that uneducated they are not self supporting; consequently, schools for the deaf are a necessity.

Of the many reasons why parents do not place their children in school, we will name a few:

First—The tender and yearning love of a parent for an afflicted child, so predominates that it overrides the judgment. The thought of separation is so painful to both, that in mistaken kindness, the child is kept at home.

Second—There is a lack of appreciation of the imperative need of the child. The depth of its ignorance is not fathomed. Most wonderful is the intuition of a father or mother. How often have we seen them translate the rude sounds and awkward gestures, or even the profound quiet of the child into thoughts that would do honor to the most gifted and cultivated mind!

Third—There is criminal ignorance of the advantages afforded by schools for the deaf, and sometimes even ignorance of the existence of such schools.

Fourth—Sometimes the child is kept at home that the selfish parent may have the benefit of his labor—claiming that it is necessary to the support of the family.

Fifth—A large class of pupils are supposed to obtain a sufficient education in one, two, or three years, and are then left to get along through life as best they may. The State's money is squandered on such pupils, and they derive but little benefit from the school. The average number of years each pupil attends our schools is surprisingly small. In Missouri, it is scarcely five years, and, we presume, but little better elsewhere.

How can knowledge of the school be disseminated most effectually? The names and addresses of one hundred and seventy-five children not in school in Missouri were learned by means of postal cards

addressed to Postmasters. To parents of these children circulars of information were sent. Newspaper advertisement is expensive, and besides, the very people we want to reach do not read the papers.

To remedy the willful ignorance and criminal negligence on the part of the parents of the deaf we would suggest a compulsory school law. We are aware that this subject, as pertains to the public schools of our country, has been worn threadbare by discussion, and it is said to admit of about equally strong arguments on both sides. Neither are we ignorant of the fact that one of the most formidable obstacles to the enactment of a compulsory school law in this country is the feeling of repulsion that arises in the heart of an American at the very thought of compulsion, no matter how derelict we may be in the discharge of obligations to our fellow-men or to our children.

In arguing this question we will consider the schools for the deaf as part of the public school system of the country, and hence all arguments favoring compulsion of attendance on the part of hearing children will be shown to gain added force when applied to the deaf. Is it not true that the States have in the past made sufficient appropriations for the support of schools for the deaf? Is it not true that more than half the deaf children of the United States are allowed to remain in ignorance? Alas, how dense and dark the cloud that settles upon the mind of the uneducated deaf mute.

It is claimed that a compulsory law is opposed to free American institutions. We would ask whether we Americans are not born under law? Is not taxation to support schools compulsory? Is the one more unjust or oppressive than the other, and does not the law compelling men to submit to taxation to support schools suggest the law requiring attendance upon them, that their benefits may not be wasted?

It is a well known fact that those who do not utilize the means provided for the education of their children, pay the least tax, and being, as a rule, illiterate, are wholly unable to educate their own children. There seems to be in the heart an inborn opposition, and even an actual hatred, towards any law or institution that presumes to step between the parent and the child.

Now, suppose a neighbor's child were being injured bodily by an infuriated parent. Would a community sit quietly by and allow this? When the deaf mute child is left in ignorance, not through malice, but on account of lack of information of those who love it, should there not be laws enlightening such ignorance as this? The result of the injury in the one case is bodily, and hence temporal; in the other it is mental and moral, hence eternal.

Compulsion should not be the foremost thought in the compulsory law. The leading thought is to enlighten and to lead in the path of duty. So of all laws dictated by an enlightened judgment they are but Christianized, condensed rules for the guidance of men. It may be argued that as prohibition in liquor does not prohibit, so compulsory school law does not compel. We admit that it would take time to successfully enforce such a law. The obstacles to be overcome in enforcing prohibitory laws in the liquor traffic do not exist in enforcing compulsory school laws. Men are goaded to violate the one by an unconquerable thirst for drink; they would be tempted to violate the other by an unenlightened selfishness. Did they see the matter in its proper light their tender love for the afflicted child would inspire them to do or to suffer anything that duty pointed out.

It may be said that while this would be a good law we are not ready for it. I would answer that we were not ready for many of the best inventions that have distinguished our age. Many of the wiser ones were not ready for the inauguration of the Sabbath schools, nor for the Young Men's Christian Association work of our country.

It may be asked why we instructors, teachers of deaf mutes, are discussing a compulsory school law for the deaf. We would answer, that while we are not lawmakers, we are in a position to know what laws are best suited to the deaf, and we feel certain that the matter only needs to be presented to be acted upon.

We have not attempted in this paper to enlarge upon any thought presented, but hope the convention will see fit to take the subject up and discuss it fully.

THE CHAIRMAN: This is the only paper upon this peculiar subject which will be presented to the convention. Will you discuss this paper now?

REV. DR. THOS. GALLAUDET, of New York: The question seems to be, how are we going to aid these deaf children to get an education? While I think that something might be accomplished by a well devised compulsory law, I will venture to give a history of the institutions of the State of New York, to show that, although circumstances may differ in other States, the time has come when those who lead in the education of deaf mutes should open the way for other institutions. It is very natural to concentrate upon one point, and for many years in a State it is not essential that another point be established. The experience of the last ten years in New York shows that by judiciously multiplying institutions we have brought under instruction several hundred more pupils. The old New York institution had the field at first—I forget the order in which they came—but two or three others were established, one at Buffalo; and it was supposed that those were sufficient. There came a movement to establish one at Rome. That has now, I think, one hundred and forty or one hundred and fifty pupils. Then, soon after that, came the movement to Rochester, and that was thought to be entirely wide of the mark, as enough pupils could not be obtained there to make it an institution. They have now, I think, about one hundred and fifty. Then at last there was a portion of the State left out of the reach of the ordinary means of travel, away off in Franklin County, in the northern part. Two years ago it was thought expedient by some gentlemen of that part of the State to assert a claim that a school be there established; and at the end of two years, so established, had forty-five pupils, with the expectation of having sixty at the beginning of the next term. But there is a singular fact with regard to this last school, and that is, that the majority of the pupils there, the young men, are over eighteen years of age. I visited it only about five or six weeks ago, and saw the results of the training. Men who had grown up in ignorance, twenty, twenty-two, and twenty-four years of age—you could see the results of training, even in their physical condition, in the way in which they looked and carried themselves. I saw them when they began some two years ago. So it seems to me that, instead of expecting to gather in all of the deaf mutes from every part of a large State, by compelling their parents to send them there at great expense—parents, many of whom do not appreciate the education—it would be better to bring the school within a reasonable distance, and to make it known to every one that there is a school for deaf mutes

only a little way off that they can reach in a few hours; that if the child is sick they can go and take it home; thus seeming to bring the education to the doors of many families.

I only say this to show what has been accomplished in New York. I do not know that the circumstances are the same in all other States; but I do ask the educators of the different States to be careful upon this great question, so that, if it is necessary for another institution to be formed in another part of the State, it shall be conducted by those who have had experience and an interest in the matter, and not left to some new, enterprising person who will have to get experience before he reaches the point of efficiency and success.

I believe this is a practical question that we must all meet; and if the time has come, let us, rather than hold back, press forward gracefully; ask the State to look around and see where a second institution can be formed, so that we can take another step towards bringing all our deaf mute children under education.

MR. NOYES: What per cent of the uneducated children of New York are in schools?

REV. THOS. GALLAUDET: I am not prepared to give figures. I am only stating the history of the last ten years. The great proportion of those who are evidently now in these institutions would not have been sent to the institution in New York City.

MR. BROOKS, of New York: I am very sorry to differ from my friend in regard to the multiplicity of institutions. I believe in one good institution in a State, according to the size of the State, but in such a State as New York, with five and a half millions to-day, it may make a difference whether you have one or more. We have seven in that State. My observation and experience lead me to the conclusion that we have too many educational institutions in this country. We have in several of the States twenty colleges, and a consequence of having so many is that but one or two of them are at all fitted for the work designed. It is better to have an institution like Oxford or Cambridge in England where there is a University and it may be twenty colleges in connection with that University, where every department, every kind of learning is taught in one of those institutions. You have a great many institutions in the State of Ohio; and we have them all over the country. They are petitioning continually for material aid to execute that which was not well done because there are not the means of doing it well. I dissent from my friend altogether in regard to the school which he has cited. He went before the Legislature and persuaded them that it was essential in the interests of the deaf and dumb to have a seventh institution in the State. What was the consequence? A loss of a great number of pupils, or a number of pupils in our own large institution where the education was much more complete, where a child could be taken at the age of six and prepared, if need be, for the college of my friend in Washington; a complete education in every preparatory department of learning.

You establish several institutions in the State according to the desire of a member of the Legislature to have one in his district, and of petitioners to have one in their district, and, as a consequence, the members of the Legislature—and I speak from experience—consent, to gratify the member from St. Lawrence or the member from Monroe, or the member, it may be, from some other district, Erie County or

elsewhere; and you so multiply institutions that you take the vitality out of the institutions already in existence very often.

My friend says there is an advantage in having the institution near to the neighborhood of the deaf mutes, so that you may get them in the county institutions where you could not get them in the State institutions. That is possibly true. But if you will exert the same power and the same influence to make your one, two, or three institutions complete in a great State, you will accomplish infinitely more in the education of the deaf and dumb, which is the principal thing desired, than if you have a dozen weak institutions in different parts of the State. Such a mode of education would commend itself to my judgment much more, and to those who study this subject and look at it in all of its consequences from the beginning to the end.

We have in the great institution of New York, which I represent, in part, the means of educating five hundred children. At one time we have had five hundred and fifty. You take them from this institution, and put them somewhere where, of necessity, from want of experience, and want of proper professors, you weaken the great institution and do not at all strengthen the weaker ones.

I will refer to the institution of Illinois, presided over by the presiding officer of this convention. It is the great institution in the State. It is the largest in numbers in the country, and, perhaps, in the world. What would be the effect of establishing in the great State of Illinois two or three institutions there? It would, almost of necessity, weaken the one there without benefiting any of the others.

What is wanted to reach what my friend, Rev. Dr. Gallaudet, most desires, is a larger interest by the people generally who are interested in deaf and dumb education, by bringing them to the main institution and educating them there.

Now, as a question of economy, what is gained by this frittering or drawing away from the great central institution by minor institutions elsewhere? What do you gain by it at last, saving a little travel in these days of rapid transit from one end of the State to the other? You give them a comparatively inefficient education. It is impossible for them to have all the means in these new institutions which they have in the larger ones. And hence, in my judgment, it is a mistake to multiply your institutions except in cases of absolute necessity growing out of their large extension of territory. [Applause.]

REV. T. H. GALLAUDET: I do not intend to discuss the question. I think there is great force in all of the remarks of my friend, Mr. Brooks. The only point of my friend is, that experience has taught that it is impossible to get all of the deaf mutes of the State into one institution. But, taking these institutions that have been formed, and they average very well with all institutions commenced. They have good teachers. I have looked into them all, and their progress is the same as in the old institutions. I appreciate very much what Mr. Brooks has said about the advantages of concentration. But there are a great many people in a large State who will not send their children two, three, or four hundred miles away. Many of them will; but many of them will not. I fear very much that, if we make searching inquiries into all of our large States now, we shall find a great many deaf mutes left out, notwithstanding these wonderful advantages which are offered them. It is a serious question, and I do not press it as one of present vital importance. It is very apparent that we cannot expect to educate all of the deaf mutes of a large

State in one institution. And I shall ask my friends who have had experience, and know how to go to the Legislature, that when the time comes for a second institution, to take the lead, and make it just as the parent institution. That is my point.

MR. MATHISON in the chair.

MR. C. W. ELY: I agree in part with both the gentlemen who have spoken. I do not doubt that increasing the number of institutions, in other words the bringing of the institutions a little nearer to their homes, will in many cases secure the attendance of a child that will otherwise lose the benefit of an education. I think it cannot be questioned that a central institution, with its larger equipment and with its better facilities for classification, can afford advantages that cannot be secured in a small institution. But before this question passes I desire to call attention to a subject which has not been touched upon by either of the gentlemen who have spoken, and that is this, that the multiplication of institutions, even with the bringing of the schools nearer to the homes of the children, even bringing them near enough to be reached in half a day's walk, you cannot always secure the attendance of the child. And here is again a difficulty which presents itself to us, how can we so interest the public that they shall make it their business to see that the deaf mute children who are growing up in their communities are secured the privilege of an education which the State promises them. I presume it is in the experience of the head of every institution in the country that there are children living within easy reach of them who do not come into school and whom they cannot get into school. It has been my experience, and I presume there is another experience which many have had along with me, and that is this: There is a small town in some distant portion of this State, perhaps in a portion near to the school, and you happen to have a scholar from that town in your school, and you ask some gentleman who knows all about the public schools and interests of the community, something about that family, and you discover that he does not know that there is such a child in that family. He knows the family, the mother and the father, and he has seen some of the children possibly in the public school; but he never heard, until you told him, that that family had a deaf mute child in it. Here is a fact that meets us; that we have not yet secured such an interest in the community, in the public at large, that they take this question home to themselves, that they take an interest in these children that have been deprived of some of the blessings which we enjoy.

Now, the question arises, are there any means which we have not tried which will bring home to the conscientiousness of the people and to their realization the fact that there is such a considerable number of children growing up deprived of the blessings of hearing and of speech. We try many expedients, and I hope that here in communication with each other we shall be able to learn from each other some expedient that has been found efficient in securing this end which some of us at least have not yet discovered. [Applause.]

MR. F. D. CLARK, of Arkansas: The Principal of the Rhode Island school requests me to say that even in that little State where there is only one institution, they are unable to get more than one fourth of the children in school. Would the gentleman who recommends a division of schools want a new one there in that case?

DR. PEET, of New York: Allusion was made in some remarks in

respect to the method of influencing Legislatures to sustain an institution, which has a bearing upon this matter of inducing the parents of deaf mutes to send their children to school; to bring proof before the people, enabling them to see it.

I remember that in the year 1844 my father went through the State of New York, taking the stage coaches which then prevailed, and visited town after town with a delegation of pupils from the institution. The result was a marvelous increase in the interest felt in the education of the deaf and dumb. People would see that such results would be accomplished. But throughout every county thus visited went an interest which had never existed before in the education of the deaf and dumb. The result was that in the succeeding fall there was an increase of seventy-five students.

In former times when the laws of the State of New York had not been formulated so perfectly as now, and when the policy of the State was not absolutely fixed, it was necessary, in order to interest the Legislature of the State, to hold exhibitions before them. And the result of every such exhibition was, not only the acquisition of additional means for carrying forward the institution, but a large increase in the number of pupils. And we find now that in order to keep up our numbers it is necessary to give, not only the annual exhibitions at that portion of the State where our institution is situated, but also to give an additional exhibition in some central part of the State, to awaken and keep up the interest established in behalf of the deaf and dumb. There is nothing like demonstration. I believe that exhibitions of the advancement of which deaf mutes are capable are the very best means of increasing this interest, and are the best means of increasing the number of pupils taught. [Applause.]

MR. WILLIAMS, of Connecticut: I agree with Dr. Peet that exhibitions are very useful in their way in awakening an interest in this subject. But I believe there is another thing which serves an exceedingly useful purpose here, as it does in other work. We know that buttonhole work is a most effectual sort of work, and that we must work upon individual cases if we are going to work surely and effectually. I have had a little experience in looking up pupils, which has been somewhat successful, which was conducted in this way: I found out from the census list that there was in New York a very large number of deaf mutes who were at school nowhere. And I tried to get at them, and had some success in this way: I got hold of a Congregational or Baptist year book, and wherever I could locate an uneducated mute in any town I wrote a personal letter to the minister located there, if I could find one; but if there was no minister to be found, then I addressed it to either the First Selectman of the town or the Chairman of the School Committee, or some person whom I thought would take an interest in the matter as a matter of Christian benevolence; and I gave him the name of the parents and the name of the child, and the age of the child, stating the opportunities that there were to give that child an education, and asked him as a matter of Christian benevolence to put the matter that I gave him into the hands of the parents, if they were people who would follow it up, or if they were those who would do or care nothing about it, that they would individually take the matter in hand and press it forward, and use all the influence that they possessed to bring these children to school. And in that manner, by individual work, I have succeeded

in reaching a great many pupils that would not have been reached in any other way. [Applause.]

DR. GALLAUDET, of Washington: I do not intend to detain the convention, or those who are doing us honor by their presence to-day, by any extended remarks; but, I would like, in this connection, simply to allude to a paper, the contents of which I am familiar with, which is to be presented to the convention. And I do this because I feel sure there are some persons with us to-day whose influence in the community at large, which is very valuable, and who might be glad to have this suggestion made.

The paper, which is to be presented to the convention, shows, at some length, the reasons why it would be very desirable, on grounds other than those that pertain to the education of the deaf, to introduce the instruction of the manual alphabet into the common schools. If that were done, the means would be in operation, the tendency of which would be to increase attendance of deaf mutes upon the schools for the deaf. If every hearing child in every community in the State were taught to use the manual alphabet, and knew that it was the alphabet of the deaf, we would have a great army of little people interested in their companions who are known to be deaf, and made aware that the education of such were possible. In this way the attendance upon the institutions for the deaf would be increased, and the object aimed at by the paper, which has been read this afternoon, be advanced in the community.

I merely anticipate very briefly the suggestion of the paper which is to come before the convention, and would say to those who are present to-day to bring away with them, in their minds, this suggestion, that possibly it may be well, in the multitude of things that are taught to our children in the common schools, to add this instruction, which can be accomplished in a very short time, so that all may know the alphabet of the deaf, and so become interested in the deaf, and help to bring them into the schools, or be able to communicate with them after they have come out of the schools, or with those who are not so fortunate as to speak or read by the lips. [Applause.]

MR. NOYES, of Minnesota: I understand that the paper which has been presented has for its object the securing of some of the best methods of spreading information concerning these schools for the deaf, and thereby securing the attendance of the uneducated deaf.

During the last twenty years I have had a little experience in this line, and have been to a considerable degree successful; and I desire to make two or three suggestions. Nearly all of our States have their departments of education so organized that there is one head, represented most commonly by the Superintendent of Public Instruction. That Superintendent of Public Instruction in carrying out his official duties is required to send blanks into all of the school districts of the entire State, that he may make returns and statistical reports from time to time. The most of you are aware that children in a neighborhood know the other children of the neighborhood better than the adults do. In other words a child in the public school will know if there is a deaf and dumb child in the neighborhood sooner than his father or his mother. In perhaps nine cases out of ten he will know there is such a child when his father would not know it. I could illustrate that by numerous examples.

In our State the Superintendent of Public Instruction, after consultation with me, embodied in his school blanks sent from his office

into every district in the State, a table in which the Superintendents of the county or of the schools were required to report to the Superintendent of Public Instruction the name of each deaf or blind child, and give his age, and the name of his father and his Post Office address. These blanks were specially prepared, and were required to be filled out and returned to the Superintendent's office. When those reports were all in he kindly tabulated the names, the ages, and the Post Office addresses of all these children, and forwarded them to my office. That method alone has given me tenfold more reliable information in the State of Minnesota than all the census returns that have been made either by the National or the State Government since that institution was founded. More thorough, complete, and reliable information has come in that way than by any of the census reports.

I would suggest, however, right here, as the result of my experience, in order to save mistakes that I would have the children recorded as deaf, and say nothing about their being dumb, because some parties get the deaf and the dumb and the blind mixed up and make the same child deaf, dumb, and blind when no such case ever occurred in our State. I would recommend that there be a statute making it a part of the duty of the County Superintendent that when he makes his returns to the State officers in order to receive his apportionment of the State money for educational purposes, he should embody these statistics concerning the uneducated deaf and the blind, in his report.

One other point. A few years ago I prepared very carefully a brief statement concerning the institution, the work and the nature of the school, the kind of education, industrial and so forth, and embodied it in the form of a little leaflet that you can put into an ordinary six inch envelope; and in almost every letter that went out of my office for the parents, or into any part of the State I inclosed one of these printed leaflets, printed in our own printing office by the deaf. I print from one thousand to one thousand five hundred a year, just as I feel I need them, and I scatter these broadcast through the State, taking pains to send them to the teachers and County Superintendents and other State officials. In this leaflet is a picture of the institution, the alphabet we use, the general regulations, course of study, and so forth. This has been of real service in spreading information concerning the school.

There is one other point I want to impress upon all of my associates throughout the country, that these are emphatically institutions supported by money that comes from the public treasury; and that every official head of the institutions should make it a special point to invite the public—I was going to say—whether Monday morning early or late Saturday night; let it be understood that the institution is open to any citizen or friend who desires to make inquiries about the school. I know that some confine it to Friday afternoons, or Thursday afternoons. But I assure you that an institution that is always open to its visitors, showing the working of the school, that five minutes of such attention will impress a visitor more than five columns carefully written in a newspaper. Let them come in and see the school. It may be they will discommode you sometimes. If persons are allowed to walk about the grounds for five or fifteen minutes, and are shown the school-rooms, those visitors go away and if they meet a deaf and dumb child, ten chances to one they will tell him what they have seen and know. Let it be understood that the public has that privilege; that they may come and will be courteously

received, although they may sometimes put very queer questions. Nevertheless, it is a public institution, and they should receive most polite attention.

Those three sources have helped me in my work more than I can properly estimate. I ask any officer who is at the head of any school for the deaf, to try this for a few years and see what is the result. In our State it has brought seventy-five per cent of the deaf and dumb under instruction.

MR. WILKINSON: Did you ever know an institution where they were not received with all of that courtesy which you speak of?

MR. NOYES: I have the names of institutions in my mind in which notices are put up on the doors: "Closed for repairs," etc. We say to all, "Come in."

DR. PEET: I am sitting by the side of a gentleman who has addressed us eloquently this afternoon, explaining the interest which he had felt when a member of the Senate of the State of California, in the cause of deaf mute institutions, and he has made a suggestion which seems to me novel, important, and interesting, and I will be very glad if you will call upon Senator Whitney to make that suggestion to our convention.

THE CHAIRMAN: Will Senator Whitney please address the convention.

SENATOR WHITNEY: Mr. Chairman, the suggestion which I made, as a temporary thought that came to me, was this: Of course these institutions are public institutions, like our public schools, for the purpose of giving the blessing and benefit of education to all the children of the State. I should judge, from what I have heard this afternoon, that the difficulty is not to ascertain and locate the places of residence of deaf mutes in any State, for by means of the United States census, and the school census, and things of that sort, it may always be ascertained what proportion of deaf mutes exists in every community, and I dare say they are almost always located. The difficulty then is, not in ascertaining where the recipients of the benefits of these institutions are to be found, but it is in getting them into the institutions themselves. How, then, can the State better do this work than by having connected with its public school department one person under the employ and pay of the State, whose duty it shall be to visit these children at their homes, in their families; visit their parents, and lay before them the great benefits which could be received by them by coming to these institutions?

Why could you not in that way overcome the disinclination of a fond mother to be parted from her daughter or son, by showing her that the child would receive greater attention, greater care, and would be infinitely benefited at an institution of this class. One person so employed could visit a large number of homes, and, it seems to me, could bring more deaf mutes within the reach of the benefits of such institutions as this than could be brought about in any other manner. Of course it implies the labor of an educated person to make those suggestions, but it does seem to me that it could be accomplished, and would be worth all of the expense that the State would thereby incur, for its feasibility might, if it should meet your approval, be easily placed before our Legislature and our Superintendent of Public Instruction, and this object secured by these means.

MR. NOYES: I like that suggestion. But if you hire a gentleman and give him a good salary, and pay his expenses, in a great many

cases these families would infer that his salary, or his income, would be so much increased by every additional pupil he got into the institution. They would be very likely to be suspicious that his plausible words and explanations were that he might make money out of it. This plan has been adopted in one of the Western States. An educated pupil who had been at the institution, and graduated, was hired to travel about the State and tell what he had experienced, what he was when he began, what training he had had there, what he had experienced in the institution, and to state to them, "Here I am just to tell you what I have learned myself," and in such cases it has worked very successfully. But if you employ an educated gentleman, or, perhaps, a politician who wants a good position, and send him about the State, you will not find the same results. They look with suspicion upon him. I have been more or less where there were deaf children, and the parents have treated me as though they thought I wanted to kidnap their child. Though I went there with the kindest of motives, they did not appreciate a particle of my interest in them. But if I had shown one of my pupils, who could tell what he had seen and how he had been benefited, and the advantages of the institution, the difference would have been very great. I have known a pupil to succeed when I have failed. [Applause.]

REV. DR. THOMAS H. GALLAUDET then offered prayer, after which the convention adjourned until to-morrow, Friday, July 16, 1886, at two o'clock P. M.

MEETING OF TEACHERS OF THE NORMAL DEPARTMENT OF THE CONVENTION.

FRIDAY, July 16, 1886.

The meeting was called to order by Mr. C. W. ELY, of Maryland, the Superintendent of the Normal Department.

Prayer was offered by Rev. W. D. McFARLAND, of Washington Territory.

THE CHAIRMAN: The first subject to be considered is Primary Language. Mr. Weed, of Philadelphia, will conduct the exercises. The idea is to have set before us here the methods of the classroom—how we begin, how we go on, what means we use to reach the minds of our pupils to illustrate certain things, to get over certain difficulties; and in the progress of the discussion it is expected that the teachers present will ask questions, make suggestions, and offer remarks from their places in the room. It is to be as informal as is consistent with good order.

MR. GEORGE L. WEED, of Philadelphia: It is certainly a matter of regret that in the conducting of this Normal Department, so practical in all its relations to our work, we are not to have the benefit of the mature judgment, knowledge, and experience of Miss Noyes, who had been selected to conduct this section. As stated yesterday by Mr. Ely, this labor has devolved upon me almost at the last hour, and without an opportunity for such consideration and preparation as I consider essential to the best conducting of this department. I am highly favored in having the same assistants, in the persons of Miss Shrom and Miss Harris, that had been assigned to Miss Noyes.

You will notice in the circular that has been sent to the institutions by Mr. Ely, that it is not contemplated that in this section, or in these sessions of the Normal Department, extended papers shall be read. This would be entirely impracticable, as it would prevent that free discussion which is so necessary to secure the greatest benefits of this exercise.

There have been some papers placed in my hands yesterday and this morning. Those which were placed in my hands yesterday I have looked over, and have selected from them certain passages that are suggestive of the kind of work that we want to consider. The other papers will be considered in the same way. This morning all that I shall do will be to read some extracts from two of these papers, suggestive of topics that we may consider this forenoon.

I will first define what we understand to be primary instruction. This is included within the first three years of the school period. The intermediate department is also in this section, and we may consider that as including the fourth, fifth, and sixth years. Beyond that will be the higher department.

Miss Goode, of the Illinois institute, in her paper makes the following suggestions: First, in regard to action writing, she says:

When I began with my class of new pupils, last fall, I determined to teach them nothing that they would have to unlearn in future years. If they wished to describe any action or express any thought that would not be correctly written in such language as was suited to them, they were not allowed to make the attempt. I consider it a great mistake to have the same action stories written again and again until they become a mere matter of memory. The principles of language should be so well taught that the pupil will be able to apply them in any combination.

Before I began to have my pupils write stories I wrote a few very simple ones for them to memorize, and when I saw that their interest was thoroughly awakened, and their imagination called into play, I suggested that they should follow my example. With some of the pupils it was very slow and tedious work, while others made rapid progress. All improbable stories were discarded, no matter how well written. I do not believe in allowing a child to send home school-room work for a letter. If we begin in this way we shall have much trouble, as the habit will cling to him. I think that letter writing should be deferred until the pupil has been in school long enough to write news items and simple sentences, such as "I am well," "I love my mother," etc. I followed this plan with my class this year.

In the place of journals I have used what we call, in our institution, news items. When the pupils began this work they wrote just a few disconnected sentences, about things that had taken place out of school. Soon they began to write connected narratives of several sentences in length. This work is preparatory to journal writing, and prevents the pupil's adopting a set form of expression. It insures freshness and originality.

MR. WEED: The other paper is by Mr. Kiesel, of Washington, a former pupil of Mr. Crouter, in the Pennsylvania institution. I have selected a few passages from his paper, which is entitled "How to Start the Child." Mr. Kiesel says:

The grand requisite for a teacher is not knowledge, but the ability to interest his scholars, to command their attention, and make them learn willingly and eagerly what he teaches.

To teach the whole of the alphabet at first is to waste time. It is a tiresome and monotonous task, and the pupils will soon lose their interest and become careless and indifferent.

Reviewing frequently what has already been learned is an important part of the teacher's work. Cramming the pupil should be avoided. The deaf child is not expected to learn in a single school year what a hearing child has learned through the ear in six or seven years. I believe it is better to teach the child the names of things before teaching anything else.

When the class has thoroughly learned several verbs in the past tense, I teach them, from signs and pictures, to write a few sentences for each of these verbs, and also give them one or two new words for the subject of the verbs.

We should not be in a hurry to introduce new verbs, but rather show and teach the different ways the same verb can be used in connection with the names of things already taught. This is laying a foundation for the writing of original sentences. As new verbs

are introduced, be careful to employ those that are most used in every-day life, such as "slept," "laughed," "cried," etc.

I have used the following method in teaching the youngest class the use of verbs, with satisfactory results: I ignore the present tense entirely for the first few months; I use verbs of the past tense at the beginning, and when the class have learned fifty or more verbs, I bring to my aid the imperative mood.

A hearing child does not know the rules of grammar before entering school, and, in fact, for many years after. Grammar is not essential to the acquisition of a sufficient command of language to express the simple ideas of young deaf children. It is not advisable to teach the rules of grammar to the youngest class. Always teach those subjects which will interest the child and that are easily learned.

MR. WEED: Now, you will notice that a number of topics have been suggested by these two papers read, and there are other topics that I know will be presented, and so I have classified the work of this primary department under five different heads:

1. Vocabulary.
2. Tense.
3. Correction of mistakes.
4. Methods of review.
5. Exercises most profitable for primary teaching, such as writing, from actions, pictorial teaching, words incorporated into sentences, stories from signs, original stories, original writing, and letter writing.

The plan is to take these topics up in order, and, for the time being, to confine our attention strictly to the topic under discussion.

The first of these is vocabulary. And right at this point may I, as introductory to several things that I shall have occasion to say upon different days, remark that what I shall refer to, is the result of experience with a single class? I happen to have had the opportunity of experimenting, by taking a class six years ago that has been almost continuous in its identity to this date. That is, there are thirteen boys of almost the same age, that have kept together during all this time. Any one who has taught in any of our institutions, can appreciate the special advantage that this has been to both teacher and pupil; giving an opportunity for experimenting that no mixed class, or class changed from year to year, could afford. One half of this class are pupils who are either congenitally deaf, or else lost their hearing so early that they were practically so. The remainder of them had a little language before they lost their hearing, but that language had been totally lost in every case, and in several cases where language had been learned, it was the German language. So, whatever advantage a child may have from once having had its hearing, has been perceptible throughout the course; and yet, all things considered, we may take the ground that it is practically a congenital class. Yet, in the exercises that I may present as the work of that class, both in the early and in the advanced or later stage, I shall be careful to discriminate between those who were actually born deaf and those who once had their hearing, so that those who wish can take that into account.

It has been my practice, from the first day to the last, to keep a record of every new word taught, and not only to keep it myself, but to require every pupil to keep it. Each pupil has had his own vocabulary book, and when a new word has been taught it is assigned to its proper page, its proper column, and its proper line in that column; so that they have a set of books that correspond in every particular, page for page and line for line, with mine.

When a word has been taught, the pupil understands that he is ever after responsible for the use of that word. He understands that

if he misuses that at any time after it is once recorded in the book, he has made a serious mistake.

Now, you may be a little curious to know just how many words a pupil will learn the first year. As a rule I am very shy of increasing the vocabulary. I give a new word only when there is necessity for its use. When the child has a new idea, and wants a word to express it, I give him that word, and when that word is once taught and is once put on his vocabulary record, he is to use that word and no other. In other words, I entirely discard synonyms in the first two years. Why? I think if you will refer to your own experience in teaching, you will find that no small part of deaf muteisms, so called, are caused by the use of synonyms. For the first two years, and, I may say, the first three years, I would never allow the use of synonyms. The consequence is that at the end of two years the compositions by that class have been, while not perfect, such an approximation to perfection as I have never had in any other class.

Take, for instance, the idea of a child reaching a place—"Mr. Smith reached Berkeley yesterday." The boy has that idea associated with that word. He afterwards sees the expression "arrived," and he asks me what that means, and I tell him, by signs, that it means the same as "reached." If he thinks he has two words to express that idea, of course, in showing his wisdom, he would use the last word, and so he brings it in: "I reached at Berkeley yesterday." I simply ask him this question: "What did I teach you to write to express that idea?" He says, "You told me the word 'reached.'" I reply, "Then write 'reached.'" "But does not 'arrive' mean the same thing—arrived at?" In the future I will show the difference, but now, at this point, you must do just as I say, and write the word that I tell you to express the idea of "got there."

When we come to the subject of past tense, this matter may come up in another form. I have thought it might be a matter of interest to the members present to know the result of a carefully kept account of words taught within the first, second, and third year.

The first year, six hundred distinct words, no synonyms; the second year, five hundred and two more words; the third year, two hundred and forty-one more words; the fourth year, three hundred and sixty-one words; the fifth year, three hundred and ten words; the sixth year, two hundred and seven words; the aggregate being two thousand two hundred and twenty-one words.

This is not including geographical names, but it is including geographical terms. But you would be surprised, unless your attention was called to it, to learn that only thirty-eight words were essential—that is peculiar—to the study of geography. Monteith's Primary Geography they have completed by the end of the third year, so that the six hundred and thirty-nine geographical names should be added to the vocabulary of the third year, which would make the number, up to the end of the third year, nineteen hundred and eighty-one words.

I would here make a suggestion to those who might want to preserve a record of the words that they have taught. I first made a miscellaneous list; I then made a list classified alphabetically. I found, however, that even my classified list was becoming somewhat confusing, and so I took a small primary dictionary and began to mark the words taught. Unfortunately I commenced with Allison's Webster's pocket dictionary, which is exceedingly defective, as it

does not give all of the forms of the verbs; I mean the irregular forms that a child needs to learn. But Worcester's pocket dictionary is a perfect model, and might almost be taken as the book for a vocabulary for the deaf and dumb; and by simply having the word taught, you can refer to it at any time to refresh your memory.

I have occupied more time than is proper for this department in introducing the subject, and will now leave it to the convention.

A MEMBER: Do the numbers upon the board indicate all the words that the pupils had learned at the end of the year; that is, had they not learned by themselves words which are not indicated there?

MR. WEED: Yes, sir; they had picked up a great many words, but they were not allowed to use those words in composition writing. In composition writing they were limited to the words that I had taught them. And here I am reminded of the distinction which I have made between a writing vocabulary and a reading vocabulary. We may confine the pupil in his composition to the writing of the words taught, explaining to him the meaning of other words as he comes across them in reading. I will illustrate in this way the method in which history lessons have been prepared: When the pupil reaches his fifth year he has completed United States history. The last year, which is the sixth, they commence and half finish English history. It has not been the practice to explain a lesson in history by signs. The theory pursued is that the child should get the idea of the history lesson from the book. Here are two or three pages to be studied this evening, to be recited to-morrow morning. What is the preparation necessary for that study? I look over the lesson and select those words and phrases with which I know the class is not familiar, and a new word is written. If they have had a synonym for that word hitherto it is put down, and then they have the idea. Their work in the evening is, with this help of the explanation of the new words and phrases, to grasp the ideas and facts of the lesson. To-morrow morning the book they have been studying is to be discarded. I discourage the memorizing of a history lesson. What I wish them to do in the morning is to write in their own language the ideas of that lesson. Of course there are phrases that have occurred in the lesson that they will have; but those phrases must be composed of words that they have learned before. In the lesson to-morrow morning they are not to write anything but what they have had recorded in their vocabulary book or their book of phrases, so that in reading the vocabulary every help has been given them, and all of the ideas are explained either by the words which have been put into the vocabulary or in the explanation I have given by synonyms; but the composition itself must be in their own language.

MR. W. O. CONNOR: You avoid the use of synonyms. Do you teach all the meanings of a single word? For instance, take the word "reach." You give it in the sense of arriving at a place; do you teach its meaning in any other sense?

MR. WEED: I go upon the supposition that the word "reach," the first time they have occasion to use it, is in the sense of "arriving at." Perhaps next week we shall want the other meaning of the word, and then it is given, and the two meanings of the same word carried along ever after. I teach the word only when the idea calls for it. If a word has two meanings, I do not give the second meaning until I have occasion to use it.

I desire to say here that, in estimating the number of words, if the

verb is regular it is counted here as only one word; that is, the words "look" and "looked" would be counted as one word. But the words "saw," "see," and "seen" would be counted as three words, the irregular form being treated as new words.

A MEMBER: I think it would be of interest if you would explain how you teach new words as they come up, and how you impress them upon the minds of your pupils.

MR. WEED: From the beginning there has been sentence writing. The first day's work was a sentence. "A boy walked." The action was performed, and those three words given and copied and studied. The verb "walked" is the only verb taught for several days. New nouns, however, are taught every day that may be used with that one verb. "A boy walked on the floor," an enlargement of the idea, and an enlargement of the sentence, introducing a preposition, and introducing an object to the verb; and in the course of time, "A boy walked on the floor yesterday." I shall have occasion to say, when the matter comes up, that the past tense was very strictly adhered to and pursued for at least two years.

MR. CONNOR: A lady member says to me that some of her little folks come to her, and she has to take their little hands in her own and shape the letters, to begin with. How can you start them off the first thing in writing sentences?

MR. WEED: Of course I write the sentence first, plainly, and have them copy it. The formation of the letters is a separate matter from the word. Those are the first letters they learn. The alphabet was not taught before words, nor was any vocabulary taught independent of that connection.

A MEMBER: How old were they?

MR. WEED: The most of them were about ten years of age when they entered.

MISS WRIGHT: What was the average intelligence of the class; was it, or not, a picked class?

MR. WEED: That is a very fair question. The class at first consisted of thirty pupils. At the end of four months, however, there was a selection made of twenty, perhaps, of that class of thirty, and in the course of time there were changes in the class—some taken out and others put in. But I am now speaking of the thirteen who commenced together and who have kept together; and this fact of their being, on the whole, an uncommonly bright class ought to be taken into account. I would not pledge myself to secure the same results with a mixed class that have been secured with this.

A LADY MEMBER: I would like to ask how many of the class were able to read themselves when they came into the institution. Did they know their own names, and could they read when they came?

MR. WEED: Three or four of them could, but I think not more than that. Some of the congenitally deaf have been brighter than the semi-deaf, and have learned more rapidly.

THE CHAIRMAN: Do you not often find that there is more difficulty in correcting the language, even the primary language, of the semi-mutes than that of the brightest congenital mutes?

MR. WEED: Yes, sir.

A MEMBER: What is your method of teaching the alphabet?

MR. WEED: I have never taught the alphabet to such children until they have learned words, and were acquainted with all the letters of

the alphabet. I have given them the order of the letters; but at first the letters were not taught independent of the words, they were simply parts of words. I think it is better to teach words before we teach the alphabet.

A MEMBER: When do you teach your class to write their names?

MR. WEED: Very soon after they enter the institution, and I suppose the most of them would learn it in a day or two.

A LADY MEMBER: Could you read their writing the first day?

MR. WEED: Yes.

A MEMBER: Do you begin by action reading.

MR. WEED: Yes, sir: action reading, such as, "The boy walks." They get the idea of the sentence from the performance of the action.

A MEMBER: Do you have them memorize those sentences?

MR. WEED: Yes, sir. I give them different sentences with each verb. The first sentence given them was, "A boy walked." That was the only verb used for several days, perhaps a week or two; but there were new nouns given, such as, "A cow walked," and so forth—the verb retained, but the nominative being new.

A MEMBER: When do you begin to teach the present tense?

MR. WEED: After two or three years, I think, is soon enough. The first two years I confine myself very carefully to the past tense. We will come to that topic to-morrow.

MR. JOB WILLIAMS: I would like to ask about this use of a complete sentence on the very first day. It seems to me there is a multiplication of difficulties there; that is, teaching two things instead of one. A child comes to us with no knowledge of words whatsoever; he does not know the name of the chair he sits in, and does not know the name of anything about him. Now, it seems to me that if you begin with the simple idea that this thing may be represented by a written word, and the book he takes up may be represented by a single word, and he is kept on that line for several days, to get him accustomed to the idea that an object may be represented by a written word, that he has only one thing to think of. But if you give, "A boy walks," he has a compound idea instead of a simple one. There is the name of the object, and there is the name of the action. I believe it is very important to begin at the beginning; not with any process of machinery that the child sees or understands, but with something that he is going to understand, and the names of a few familiar objects. Then, after he has learned ten or a dozen nouns, teach him to put a verb with them. He sees the difference in those two kinds of words. You can tell him that that one is a noun and this one a verb, and somehow or other he absorbs the idea that there is a distinction between those two kinds of words. There is the name word and the action word, and the child at once seizes upon that idea; it is fixed clearly in his mind, and you keep him right down to that thing until, by constant use of it, he has absorbed it, without any explanation, perhaps. It seems to me that in this way he gets a clearer and better idea of the sentence than he can get in any other way.

MR. WEED: Where the verb is uniform and the noun is varied, is not it the same thing as having just the reverse of that—the verb varied and the noun uniform?

MR. WILLIAMS: No, sir; you have two things, while in the first place you have but one thing.

A MEMBER: I agree with Mr. Weed upon that point, and I think that he is following the method of nature—that children and foreign-

ers learn phrases and complete sentences as a whole before they distinguish the separate words, and that has been my experience in learning a new language. I catch the phrase as a whole, and am able to use it, before I can use the separate words.

REV. MR. MCFARLAND: There is a certain kind of mechanical learning that is received in that way, but is it true that during the first two years the average deaf mute, in attempting to use his language among his fellows, is more likely to use the noun than anything else, and are not the names of single objects, as indicated by symbols, the natural way for the deaf mute, who has no language; and is not the noun the first thing fixed upon his mind, and afterwards the action made?

A MEMBER: I formerly believed that the way to learn a language, especially for a deaf mute, was to learn it just as we would learn a foreign language, in a natural way. Foreigners learn the language by sentences, but they learn it through the ear, and not through the eye, and there is the difference, I think. I used to think just the opposite, but I have come to the conclusion that a deaf mute is a deaf mute, and is not a hearing child.

THE CHAIRMAN: The arithmetic section now has the floor. The exercises will be conducted by Mr. Booth, of Philadelphia.

Mr. F. W. BOOTH, of Philadelphia, then read the following paper upon the subject of

ARITHMETIC.

Ladies and gentlemen: We are met as a section of the convention, with the special subject of Arithmetic for our consideration. That it is an important subject, will be conceded. Indeed, when we take the future material welfare of our pupils into consideration, it may not take second rank in importance as a branch of instruction even to language.

The difficulties to be met with in teaching arithmetic to deaf mutes, are many. We are here to show one another something of the methods that we employ for overcoming them. I shall present the method which I have used in my own school-room; others, if time permits, will present methods that they have used; and I have no doubt, if we give only that of our methods which we have tried and found of value, that we will be mutually profited.

If I have any fixed principle that guides me in my work of teaching arithmetic, it is this: That I shall at all times teach it as the science of *numbers*, and the art of computing them, rather than the science of figures, if there be such a science, and the art of combining them.

The method that I have used, and that I shall present, aims to avoid giving a merely mechanical skill in manipulating figures—which any drill master may give in a comparatively short time—and centers the attention and the thought of the pupil upon the numbers and the processes with numbers which figures and operations with figures were devised to represent. Figures are used—as they must be in teaching deaf mutes—but as little as possible, and throughout the course in no other than a representative capacity. Numbers and the processes with numbers are taught by the use of numbers.

Figures and operations with figures as used are but a scaffolding, aiding in the erection of the structure, which is a knowledge of numbers and their processes. Number exists as an attribute of thing

and while other attributes are more or less immediately obvious to the senses, as are color, odor, taste, size, form, and weight, number in its attributive properties is peculiarly and exceedingly abstruse. It is a conception, and is arrived at through study of relations and after repeated comparisons and judgments.

To develop the idea of numbers as an attribute of things, as also the judgment for determining numbers, the written names of numbers will be used in association with the written names of things that enter into the daily life of the pupil in the school-room and out of it. Care should be taken that the pupil does not learn the names of numbers as a mere order of words, or figures as a mere order of characters, as he undoubtedly will if they are taught in association with an order of marks or an order of manual signs. Counting should be left to a period when its purpose will be understood.

Each number should be presented as a whole, and as possessing a distinctive character and individuality. The number four may be presented as

o o
o o

and the number six as

o o o
o o o

They are presented as nearly alike as it is possible to make them, leaving the one difference that exists between them to be seen and learned as the characteristic, necessary, and universal difference. The number eight would be presented as

o o o o
o o o o

and the number nine as

o o o o o
o o o o

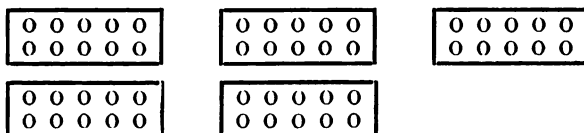
And so with all the numbers from one to ten.

It will be a great advantage to the pupil if he becomes acquainted with numbers thus in the beginning as possessing each a distinctive character and individuality, for he will the sooner perceive the relations of numbers, and become able to reason with them. He will see eight as made up of four and four, of six and two, of five and three, etc. They are the facts that give eight its distinctive character, and he will learn them as such. They may not be reasoned about or explained; they must be seen; and being seen, they may become known.

Figures, when taught, should be taught as always representing each the same number. They should be learned as absolutely trustworthy. The figure 8, no matter what its place may be, must be taught as representing the number eight—eight ones of the same denomination. The figure 1 in second place will be learned as representing one group of ten ones:

o	o	o	o	o
o	o	o	o	o

The figure 5 in second place will represent five such groups:



And so with other figures in second place. Ten such groups make a new group, and the figure 1 in third place will be taught as representing it. Two of these groups will be represented by the figure 2 in third place. By associating figures with quantities in this way they can obtain in the child's mind none other than their proper representative significance.

Other devices for illustrating our system of notation are used, the most convenient, perhaps, is the one using splints. The splints are bunched in tens; these tens in tens; and the last again in tens; so they are ready as units of any size for immediate use in making problems or illustrating them. Toy money may be used—and should be used, if it be not convenient to use real money—for the development of problems involving money. The decimal system of bunching or grading is continued, thus maintaining the trustworthiness of the figures used, in their representative capacity.

THE CHAIRMAN: Do you mean that the deaf child takes in the idea of four, five, and eight, without doing any counting?

MR. BOOTH: Yes, sir. They do not learn to do any counting in the beginning. The child must see things as a whole, at first, and afterwards analyze them. Analysis is a subsequent process. It will subsequently dawn upon him that eight is made of four and four. He will learn by using it what it is made up of.

THE CHAIRMAN: What method do you use to give the idea of number before coming to counting?

MR. BOOTH: By using the word "three," for instance, in association with objects in the room, so that he can see its application. Its meaning is developed by its use, by comparing three desks, three chairs, and so forth, simply by using the word. I do not make any attempt at explanation.

MR. GRAY: Do you spell or sign the numbers "1," "2," "3?"

MR. BOOTH: I would use my fingers to show the "3," but I would not use the deaf mute sign for "3." I do not care how the pupil gets the idea; all that I want is that he shall know the figure as representing quantity.

MR. McFARLAND: Would not the ball frame show that, without a figure, sign, or anything else?

MR. BOOTH: Yes, sir. The Chinese know arithmetic as a science, and practice it as an art, without the use of figures. If I can do anything in this connection to wipe out figures and give the idea that arithmetic is the science of numbers, and the art of computing numbers, and not the science of figures and the art of combining them, it is the work that I have set out to do; to teach numbers and not figures. My pupils use these splints upon the table to illustrate their problems.

I have other mode of illustration. The idea is to bring into association the figure and the quantity, and the quantities, in comparison with and relative to each other and to one another. I take

seven of these splints, and subtract four from them, and ask: "How many have I left?" I use these circular marks, first, and then use objects to bring out their use [showing thin, circular wooden pieces]. You may have apples brought into the school-room and divided into halves, quarters, and so forth, and in this way the problems themselves will be presented to them as real problems. I would show the apples first, and different things in the room, and then put the rings upon the board and teach the words in association with those things first, and afterwards teach figures in association with those, and also in association with signs, and have them use this as their own device, and after awhile we will use the figures in connection with these rings.

I do not teach the deaf child to write figures very much. He must write figures, because he must invent his system of notation and numeration, of necessity. Necessity, with the deaf child, is the mother of invention, and he must invent, with my help, of course, or an occasional suggestion, a system of writing figures, adding, subtracting, multiplying, and dividing. I leave him to his own devices, at first, and gradually suggest the conventional way of writing and representing numbers and processes of numbers [illustrating]. I do not care what course you adopt, just so you make figures significant of what figures really are.

Thus far we have begun teaching notation and numeration. Let them learn to count just as soon as they see the usefulness of counting, but do not begin the teaching of arithmetic with counting, because they get the mere order of signs in association with a mere order of marks, which are significant of nothing but the signs, an order of marks upon the slate.

THE CHAIRMAN: The hour having expired, the further discussion of this subject will be postponed and the subject of kindergarten work will be taken up by Mr. Westervelt, of Rochester.

MR. Z. F. WESTERVELT, of Rochester, New York: At our institution in Rochester we have had for the past eight years a department called the kindergarten. I have here a printed report of the class work done in our school for the past year. This was printed at the close of the school after the examinations, or just as the school was closing. I will endeavor to take out from it such of the work as is peculiarly kindergarten, though in our classes for little children a very large part of the time is necessarily given to language instruction that is not peculiar to kindergarten work. It is very much like what is done in older classes, with this exception perhaps, that it is all taught upon the fingers. With our young class very little work is done the first year upon the blackboard.

Our classes in the kindergarten are divided into A, B, C, D, and E—five classes. The E class, the lowest class, have had during the past year kindergarten handy work exercises. They have had the trial book. These books are made of newspapers in which pictures are pasted. The pupils have been taught to cut pictures neatly, and to paste them properly into books. These books are simply newspaper sheets twelve inches square. The books are made by the teacher but the pupils cut out the pictures and then paste them on to the pages of these newspaper books. This exercise it is understood is a means by which some skill of hands may be acquired, so that the pupils may be able to take up the more difficult exercises in time.

The lessons in sewing patchwork have been given frequently, and

all in the class have learned to thread a needle and tie a knot and sew fairly. Some few of the very little ones sew quite nicely. On certain days in the week the children have traced simple outline pictures on tracing paper. These drawings have been preserved in books, which serve as a record of progress which each of them have made.

Specimen boxes hold an important place in kindergarten work. Each child has one of these boxes [showing], and in these boxes they collect specimen objects, such as stones, seeds, and so forth. They are collected as the children go out for their walk; whatever they find being picked up by them. The child may pick up a china doll's head; a thing of beauty but it is not a natural object and he cannot put it into his collection. They are limited to natural objects. The child picks up an object and asks, "Did God make it?" And he is told "Yes," and that he holds as a treasure and puts it into his box. The practice is to collect fifty pieces the first year, while the children are in the E class. The second year they try to collect fifty objects more. It is quite easy to collect the first fifty pieces; but to collect the second fifty is much harder. Here is a list of objects which the children have collected.

They learn quickly to spell the names of these objects, and as the teacher calls for them they endeavor to get all of these things in common. They have little bags which each one makes for himself in which they collect grain. Here is a bag of wheat. The bag being made of gauze, they can see the grain through it, and they are always ready to show it.

A LADY MEMBER: How do they learn to spell them?

MR. WESTERVELT: Simply by repetition. Every time a child takes up anything he will take it to the teacher, and look at him, perhaps, to know if that can be put into the box, and the teacher will say, "Yes, God made it."

A LADY MEMBER: How does the teacher communicate with the child before it knows words?

MR. WESTERVELT: By motions or signs, or in any way to make the child understand. But the child very quickly learns to understand the spelling or the face. These children are the entering children of the school.

A MEMBER: Do they understand, "Yes, God made it?"

MR. WESTERVELT: They understand it after a fashion. They have an idea, and probably as much of an idea as any little child would have who is a year and a half old if its mother was to say the same thing to it. He might get some glimmering from the words; but a child two or three years old probably does not understand much about God, or much of the sentence that I may spell to him. But he would understand it just the same as if the teacher were to say, "God made it." A little child cannot understand about God, we do not ourselves. [Applause.] So if he get the word, the word is a sign with him, and it seems to convey an impression that clings to his mind.

MR. MCFARLAND: Do not the words mean "Put it in the box?"

MR. WESTERVELT: Yes, sir. But after a time he sees from our use of the word God that there is something else connected with that word. That he is to reverence that word, and consequently he is to value these things. And I have known a child to cry bitterly because somebody had taken a bit of fur or a piece of cotton that he had had for a long time.

A LADY MEMBER: At what age would you begin to teach the children to write?

MR. WESTERVELT: During their first year in school. But our first purpose is to teach them to recognize and spell words, and to spell them themselves.

A LADY MEMBER: Do you write the word before you teach them to spell it?

MR. WESTERVELT: No; I spell it to them first.

MR. ELY: Have you been in the practice of putting upon the wall short sentences such as would be first needed for the use of the child?

MR. WESTERVELT: We have charts in the dining-room and everywhere. They learn to recognize words as words, not as composed of so many letters; but it is simply that form that they recognize. They will go up to the board and point to that perhaps because they want to get something; and they recognize that those marks there mean the thing that they want in the closet. And they point to them, not yet being able to read or spell or write these sentences or these words upon the blackboard; but they recognize them, and know that when they point to them they get the objects they desire.

THE CHAIRMAN: On these charts do you not have complete sentences?

MR. WESTERVELT: Yes, sir; expressing various wants, like "Please give me some water."

A LADY MEMBER: Do you allow them to use any signs for "Give me some water?"

MR. WESTERVELT: Yes, we have to; but very quickly they find that this will bring it with more certainty and positiveness. If there is an entire sentence like "Please give me some water," and they can point to that, anybody will understand it; even those who do not understand signs at all. Many of our little children have learned our arbitrary sign for water, and may resort to that. But this will bring it certainly, because there is the sentence. But very soon they learn to spell. We endeavor to familiarize them with language spelled upon the fingers, all the time they are out of school.

MR. METCALF: Do you have your children collect manufactured articles, such as paper, cloth, and such things, at any time?

MR. WESTERVELT: They do that later. That would come in class A, in a more advanced division of the kindergarten, after they had acquired a more free use of language. During the latter part of the first year simple facts are taught to these boys, such as refer to the objects in the specimen box: "The coal is black." The children have learned twenty-five or thirty sentences, perhaps, about these objects in the box, and spell them very quickly.

A LADY MEMBER: How long do you keep young children, those under six years of age, in school?

MR. WESTERVELT: Five and a half hours a day. But a considerable portion of this time is spent in play, indoors and out, with their teachers and companions. No one exercise is longer than twenty minutes.

MR. FRANK: Does the teacher teach the child the signs for cow, horse, and other objects, when teaching them the objects?

MR. WESTERVELT: No, sir; the teacher does not make signs unless it is in conversation with the pupil. The last hour in the afternoon, in the first primary class, the teacher converses with the little children; and this conversation is in the child's language; and any lan-

guage, words, or pictures are used that will entertain the child. The teacher uses the child's signs, or endeavors to have the child do his own talking with his own signs; and then, when he has used the sign, and has a clear idea of it, the teacher gives him a word for it, and lets him make it. That sign is used again and again, until he learns it, and uses it for the object for which he has one sign and the teacher another and different one. He will talk with the teacher, and he will make his sign, which, perhaps, is not understood by the teacher. He will then get a picture to show what he means, and then the teacher spells the word, such as "cat," to the child, and he understands that this [spelling the word] is our sign for that animal; and, after that, he has no more difficulty in recognizing our sign. The English word is just as good a sign to him as the arbitrary sign that has been designed by teachers of the deaf.

The class next above this in grade, in special kindergarten work, have much the same work as in the class before described. They have to cut and paste the pictures into books made of white paper, instead of newspaper. Their books have manilla covers, and the pictures are more carefully selected. We send out to our friends, and ask them for illustrated papers for them to cut out, and we get advertising books.

On the first page are pasted pictures of the different articles of clothing. Following this, are pictures of tableware, tin, and ironware, and also pictures of household furniture. Each article, as the child pastes it into his book, is numbered, and upon the manilla cover is a list of the articles written. Then the teacher comes to the children, and asks them what is this? or holds up a picture to the class, and asks them the name of it. If they do not know, the name is on the cover, and they can refer to it and find out. Once a week this class has had lessons in sewing, and they have made patchwork, and fastened their thread, and sewed over and over. A training of the fingers has been accomplished by this series of exercises, in newspaper work.

They have torn a newspaper of the width of a column. For this purpose we desire to get paper of good texture, so that it will tear, and paper that is well printed, and white, so that it would be of even and uniform appearance, and for that reason we have subscribed for copies of the "Home Journal," as that is printed upon the best paper that we could find. The pupils are provided with, each, a quarter sheet of this paper; they tear it into columns, and each of the columns into squares, tearing enough to make packages of twenty-five pieces into each little bundle [showing a specimen of one of the bundles].

They are torn into squares. Now, while it looks like a very easy thing to do, if you will try it you will find it is quite a difficult thing to tear that paper into a column, and then fold it over, and cut it so as to make an exact square. The child is taught to do this neatly, and it becomes a matter of interest, because they like occupation; they enjoy doing this, and they make twenty-five of these little squares, that are exactly alike. As these are piled one upon another, they must be made of exactly the same form, and to make this little bundle of twenty-five, the child has probably torn a hundred, and some of them more.

A MEMBER: Do they count them?

MR. WESTERVELT: They do count. They do not know twenty-five, but they know how many squares there are, and they know when

they get enough. They learn that twenty-five is a large number. How they know that they have twenty-five I cannot tell you; but the teacher tells them when they have, and they know when they have. They have also torn other portions of the paper and folded it into these different forms which I exhibit here [showing]. Twenty-five of these are also tied into a small package.

The newspaper lesson we value very highly. We can see the effect of it in all succeeding work in the kindergarten. Economy is taught. Every particle of paper is saved. We consider how we can use the paper to the best advantage. They are taught that scraps and bits must be taken care of for a use that will come soon. And the paper is folded with exactness, torn carefully and neatly, and the work is done entirely with the fingers; no tools are used. This is done to teach them skill of hand. This teaches neatness and accuracy. They have had a lesson in color, and can readily discriminate between the different colors.

The class next above this in grade have represented upon cards the outlines of the curvilinear solids, using colored pictures. They have finished their newspaper lesson, and in doing so they have made lamp lighters, large squares and small squares, and have folded, torn, and cut, and learned to use the scissors.

The finishing work consists of a package of twenty-five or fifty squares folded, twenty-five each way, and two packages of lamp lighters. This is the first year's work. The lamp lighters of the C class are made of white paper, the margins of newspapers.

The class have now begun the work of weaving. They have finished the weaving shown on Card No. 1 [showing], which consists of four strands (?) of two different colors. There is supposed to be some connection, and the child is led to see some connection, between this simple form of a sphere on the back of this card and the simple colors.

Classes A and B, the more advanced classes, have woven these other mats [showing]; and this has been done in dictation.

These dictation exercises are most interesting and valuable to the children. There is hardly anything else in our school really that is more valuable in the development of the children than working under dictation. "Put this end under that and over 2 and under 2 and under 1 and over 3," and so forth, and have them obliged to obey your instructions to produce it, the form required; not being known to them until after it is brought out at the completion of the work; and if they have made mistakes and disobeyed your directions the whole work has to be taken to pieces, because they have not the same perfect form which the teacher had in mind before she began her lesson.

The class have also little books called "The Five Necessities of Life," that is a little book made of white paper, on the first page of which they paste a picture illustrating the first necessity, that is of breathing. It shows a boy at an open window, supposed to be there to get air. The teacher then gives the child a talk upon the necessity of ventilation; that we must not be in a room that is too close.

A LADY MEMBER: How does the teacher impart that information to them?

MR. WESTERVELT: These are the A and B classes, and they are able to talk; and would have no difficulty in understanding simple sentences. I talk to them just as I would to any other little children.

One of the five necessities is illustrated on the next page—the necessity for food; being illustrated by more pictures, of which this little child has found four. [Showing.]

A MEMBER: Will you spell to us just as if we were your little children and illustrate that exercise for a moment. [Mr. Westervelt does so.]

MISS BLACK, of Rhode Island: Do you accompany that with language?

MR. WESTERVELT: These children to whom I would spell such sentences as this could speak or understand me, perhaps, if I spoke all of this, though, perhaps, not with the same certainty.

MISS BLACK: I understood that you always accompanied the sentences with the spoken language?

MR. WESTERVELT: No, not simultaneously; but we endeavor to teach the children to speak the words that they know how to spell. We do not speak and spell at the same time always.

MISS BLACK: Do you not usually, in most of your classes?

MR. WESTERVELT: No; some of our classes recite entirely by speech, but the most of our classes recite almost entirely by spelling by fingers. In the kindergarten it is done entirely upon the fingers except special instances, just the same as is done in all combined method schools. The next page is "drink;" and here are some cows drinking water. The next is "exercise;" and here are some children playing. The next is "sleep." Those constitute the five necessities.

MR. GRADY: Do you give your little children slates?

MR. WESTERVELT: The young pupils, the E class, use the slates for drawing. These slates are marked upon one side, just as the kindergarten table is marked. And they are taught by laying splints and other forms to be drawn upon the slates, the same figures as are laid upon the table. The time for the consideration of this subject has now expired. I have given in this printed report as full a statement of what we do at our institution as could be given. [Referring to "Daily Paper for Our Little People," vol. 6, No. 40.] Each teacher has written a report of her own class work for each hour; and these several reports have been combined under the head of each grade.

On motion of MR. WALKER it was decided to hold evening sessions hereafter.

Normal department adjourned until half-past seven o'clock P. M.

AFTERNOON SESSION.

PRESIDENT GILLET in the chair called the meeting to order.

DR. PEET made the opening prayer.

The minutes of the last meeting were read and approved.

MR. WESTON JENKINS, of New Jersey, then read the following paper entitled

APHASIA IN RELATION TO DEAFNESS.

In the popular conception, every person who is properly classed as a deaf mute, is so entirely deprived of the sense of hearing that even the most violent concussions of the air can convey no impression to his brain, except by the way of the ordinary non-specialized nerves of sensation. To him, not only are the tones of the human voice, the

notes of music, and the song of bird inaudible, but the roar of artillery and the crash of thunder are as if they were not; and he moves amid a maddening din of discordant noises, unconscious of anything but profound silence.

It is needless to say to this audience, that any condition at all like this is the exception rather than the rule among those who are brought under our care. No feature in the prospectus of this convention has been more attractive to teachers of the deaf throughout the country, than the prominent part assigned to the cultivation of hearing, and we all hope to profit largely by the researches of those of our number who have been especially successful in this direction.

I suppose that every head of a school for deaf mutes often has application made to him for the admission of pupils, who are described as "dumb, but not deaf." Generally, such pupils are of enfeebled intellect, their disability varying from absolute idiocy upward to a mental condition which falls just short of the activity required to seize and comprehend the complete forms of spoken language.

In some cases of this class, where the deficiency is least, considerable benefit may be derived from instruction by the methods adapted to deaf mute pupils; though, probably in every such case, better results could be attained in a school intended especially for feeble-minded youth.

There may be a second class of the "dumb, but not deaf," consisting of those whose vocal organs are malformed, paralyzed, or otherwise unfitted to produce articulate speech; but, in my own experience, I have never met with a case in which the inability to speak was demonstrably due to this cause.

I wish, in this paper, to give a brief account of a case which has lately come under my observation, in which entire inability to produce articulate sounds seems to coexist with the possession of normally acute hearing, and yet not to be due to either of the causes mentioned above. I shall venture to put forth a hypothesis as to the cause of this inability, which, if not shown to be untenable, it may be worth while to use in determining the proper treatment for this and other similar cases.

Walter C. F.—, a youth of nineteen, was admitted to the New Jersey School for Deaf Mutes April 22, 1886. He was rather undersized for his age, and appeared not well nourished. His appearance indicated a scrofulous diathesis, and he suffered from chorea in a very noticeable degree. When spoken to, or when his attention was attracted to anything, he uttered loud and harsh cries. On applying tests for hearing it was evident that he was not deaf—that in fact his hearing was as good as the average. His inability to speak being plainly not due to deafness, and, taken together with his unprepossessing exterior, justified the presumption that he was of a grade of intelligence too low to profit by instruction. However, I determined to try him, and took him in hand myself. To my surprise he learned in a very few brief lessons to recognize the written names of several objects, remembering them correctly from one day to another. His attempts at copying, though they could not be called successful, evidently failed by reason of his physical infirmity, and not because he lacked the perception of form.

I tried to teach him the spoken words for the objects shown him, as door, hat, key. The sounds evidently awakened no idea in his mind, nor could he give any approximate imitation of them. When

I pointed to the written word or to the object while pronouncing the name, he seemed to understand that I meant the sound as an equivalent of the writing, but he could not learn to distinguish between two spoken words.

On the twenty-fifth of April, he having been in the classroom only two days, he unfortunately fell and fractured his lower jaw, and as his recovery was very slow, and retarded by complications, he did not attend the sessions of school again during the term. While confined to his room I saw him often, and was confirmed in my opinion that he was not at all below the average of our pupils in intelligence. He rapidly learned to converse with the other boys in signs, and interested them by graphic descriptions of the fishing industries of his native town. Finding him once looking at a slate covered with writing, I pointed to him and then to the slate, looking inquiringly at him. He took the idea at once and smilingly shook his head; then, looking around, took up a book, and opening at the fly-leaf showed me the owner's name, then pointed to the slate.

In trying to account for the apparent contradictions in this case, I was reminded of the phenomena recorded in the cases of the somewhat rare disease of aphasia—or loss of speech. This form of mental disease was first prominently brought to the notice of the medical profession, as I believe, about twenty-five years ago—certainly it was then for the first time known to the lay public—and it has since then been carefully studied by eminent surgeons and biologists. In the various forms which this disease assumes, and in its different degrees of intensity, the patients may merely be unable to recall the names of familiar objects, being forced to describe them by circumlocution, or he may be unable to speak intelligibly at all, substituting, perhaps, one word for another, or, perhaps, uttering mere gibberish. He may, at the same time, understand what is said to him, or he may have lost entirely his ear for language, so that his native speech falls meaningless on his ear. In the corresponding way, and in the same varying degree, the ability to remember and use written language may be lost.

In all the phases of this singular disease, it is discriminated from mere imbecility by the circumstance that the mind remains capable of performing all its functions except those involved in the understanding and the production of speech. For instance, the patient may be able to play a hand of whist correctly, but not to name a single card.

The case of the young man described in this paper seems to me to present the symptoms which we should expect to see in a congenital case of that form of aphasia known by the self-explaining term *word deafness*. It seems evident that a person so affected would be very likely to be classed as a deaf mute, unless attention should be particularly directed to his ability to hear, and it is notorious that such attention is seldom given. Consequently, if this defect is occasionally present from birth, there may be a number of such cases, and they may appear, from time to time, among our pupils.

The course of instruction adapted to the teaching of written language to deaf mutes should, as it seems, be the best adapted to secure the same end for those affected with word deafness, and the progress to be expected should be the same in both cases. The requisition of oral language in such cases would seem to be out of reasonable expectation.

Without professing that the facts in the case described above demonstrate the mental condition, by which I would explain them, I myself am so impressed by them that I shall always be more careful than I have hitherto been, before passing the verdict of hopeless mental imbecility on a speechless child possessed of the sense of hearing.

THE CHAIRMAN: This paper is now before the convention for consideration.

DR. PEET: The paper just read is one full of suggestions. I have under my instruction—I might say my personal instruction—a boy, the child of very respectable and intelligent parents, who had been sent to school since he was a small child, and had private instructors, in the hope that he might be brought to a knowledge of the English language. His parents did not regard him as imbecile, although he could hear perfectly and obeyed all directions that were given to him, and yet he did not speak. Ordinarily, the possession of hearing without the possession of speech is *prima facie* evidence of imbecility. But his parents could not believe that he was imbecile. Finally they corresponded with me, asking my advice in the matter, and I advised them to bring him to me, and let me make an examination of him. I was very soon convinced that he was a bright, intelligent boy, whose faculties had been somewhat benumbed by the fact that they had not been exercised in expression. The boy could not write the names of objects around him, and could not use sentences. The question, which had been studied very minutely by physicians, as to why he had lost his hearing, had been unanswered until the time he was brought to us. We attempted at first to teach him the manual alphabet, but we very soon discovered that there was a physical difficulty in the way of his forming the letters; and on further examinations, proved that he was paralyzed in his fingers and paralyzed in his organs of speech. Every test that we subjected him to led us to believe that paralysis was the foundation of his inability to speak.

My first idea in attempting to teach him the English language was to convert his hand into a tongue. He could not pronounce a single word, nor make any sound except a most simple one which could not be combined with others. We began by teaching him when we gave him a word, such as "pen" for instance, to give the letter of the manual alphabet which corresponded to the power of the letter. Giving him the word "pen," I simply closed my lips, it being a silent letter until the vowel that follows it gives its tone; and when I closed my lips I taught him to put his fingers in this way [giving the sign]; and he learned that when I closed my lips he was to make the letter "p" with his hands. Then I would give the short sound of "e" and teach him to make the sign for that sound; and when I gave the sound of "n" he would give with his hands the sign for "n." I did not teach him to spell "pen." But I would then say "pen, pen, pen," and he would make the sign for those letters. Then, after having given him enough words to get all of the letters of the alphabet from their sounds and not their names, I felt as if I had converted his hand into a tongue, so that he imagined that he was speaking when he made the manual alphabet. The manual alphabet was converted into an expression of the power of the letters in his mind. Then I took a simple reader (Monroe's) and read the little words and the little sentences by which the various sounds of the English alphabet were developed, and now he can, in accordance with sound, spell out the little sentences which are in that reader. And, in reviewing,

we let him take the book, and while the teacher speaks he spells the words right along for the whole sentence; and he understands them. We ask him all sorts of questions. We ask him to point to the picture of the boy, and ask him, "What is the boy doing?" He is unable yet to reply, as he has not English enough; but when we ask him, "Is the boy catching the bird?" he will shake his head; and when we will ask him, "Is he shooting the bird?" he will answer "Yes," by signs. When we tell him to point at what he is shooting he will point to the bird. When we ask him, "Is he shooting the tree?" he will answer "No," by a sign. So we ask him all sorts of questions; but he has not yet language enough to reply in answer to them. But we are developing the power of language, converting his fingers into a tongue. And the next process that I was beginning with him just as he was leaving, at the close of the term, was to have him write from dictation instead of using the manual alphabet. I have an idea that after awhile he will think in language; that is, that he will associate the forms of language with his fingers; that he will imagine himself speaking with his tongue, so that instead of hearing himself speak he will feel himself speak by the use of the manual alphabet.

It is a most interesting case; one which I shall watch very narrowly, in the hope of making some discoveries in regard to the best method of teaching these hearing mutes; not imbeciles, but weak-minded, why? On account of their original condition? No; but because they have not had the power of expressing their thoughts in speech or writing. In order to get strength of mind; in order to have power over one's faculties, we must use them. And that, I think, is at the bottom of a great deal of what is called imbecility; that they have not had the power of using their organs of speech, and for that reason their faculties have been unexercised, and they are weakened.

And I would also say that I think that there are many points in the education of the deaf and dumb that could be used with very great benefit in the instruction of the feeble-minded. And I am getting more and more of the opinion that our methods ought to be introduced into that class of instruction, and that it would be a very great benefit if the institutions for the feeble-minded were under the care and guidance of those connected with the institutions for the deaf and dumb. [Applause.]

REV. GALLAUDET: I desire to ask if this lad uses any of the common signs of the institution? Does he communicate with the boys around him?

DR. PEET: Yes, sir; he has picked up this intercourse very rapidly.

MR. ELY: If I understand you, you taught this boy to spell from a movement of the lips?

DR. PEET: Yes, sir.

MR. ELY: Does that involve phonetic spelling; or how did you get over that difficulty?

DR. PEET: This boy can hear, and it is not necessary that he should see my lips except where there is a silent letter. For instance, if I have given him a subtonic letter, not one of the mute letters, it would not be necessary for him to look at my lips. But, if I had given him a word like "table," in order to get the letter "t," it is necessary for him to look at the position of my tongue, because it is a silent letter. But, if I should say "d," he would understand that that, being a subtonic letter, would be "d." But the letters "p," and "t" are silent, and in order that he might know the sound I was going to

give, I had to call his attention to the initial letters of the words "table," and "pen."

MR. ELY: Suppose it was the word "photograph?"

DR. PEET: If I was teaching a deaf mute to read the lips, I should call his attention to the fact that I made the aspirate "f" [illustrating]. I should spell it phonetically then, if I could. But, with this boy, I have adopted the plan of teaching him to give the true spelling of the words; as, "pho" for pho.

MR. BROOKS: My own judgment is, that a large share of mental weaknesses from which these persons suffer, grows out of physical infirmity, and that if you can cure the physical infirmity of a class of people who are mentally weak, you place them in a condition where they can certainly be improved, and instructed beneficially for themselves and society.

The most remarkable institution we have in New York State, was designed for the benefit of what are called "the imbeciles in the State." And I remember, about thirty years ago, when a man of large benevolence gathered up from various parts of the State, at first some six or eight children, which was the beginning of what has now grown into a great public institution. And of those children whom I first saw, there was not mental capacity enough to put the hand inside of an ordinary barrel hoop. So weak was the mind, so far from anything like a concentration on knowledge, that the child would bring his hand this way and that, and by and by, as a great success on the part of the teacher, the hand was put inside of the hoop, and then the hoop was reduced finally into a ring, and the mind so cultivated that a pencil could be put through a small ring. And from that wildness of nature has grown up one of the most remarkable institutions in the country, and the first one that was established in the country.

And I draw from this the conclusion of the possibility of taking almost any possible infirmity, and by kindness of heart in the cultivation of the mind, so educating what are called imbeciles, and what are known to be insane, as to make it possible to make even this class of beings useful in society.

That institution has grown, until now it has become one of the large ones of the State, and what were called imbeciles years ago, and what were helpless beings for any self support, are now so conducted that the girls and women of the institution are able to make their own dresses, and improve their own minds; and, where in the beginning it was impossible to put a hand inside a hoop, these children have gone to the blackboard, and made, for the time, almost as much progress in knowledge as we have made in the institutions for the instruction of the deaf and dumb.

Nothing is more true than the sentiment of the poet when he says, addressing himself to everybody occupying a responsible position: "Canst thou not minister to a mind diseased; pluck from the memory a rooted sorrow; erase out the written troubles of the brain, and with some sweet, oblivious antidote cleanse the stuffed bosom of that perilous stuff which weighs upon the heart?"

Such instruction is impossible for the imbecile, for the deaf and dumb, or for the blind, but there is no creature upon the face of God's earth whom it is not possible to improve morally and physically. [Applause.]

MR. WILKINSON: If I had known of this paper before I should

have had one and possibly two cases to present which have a decided bearing upon the discussion. I am satisfied that what Mr. Brooks has just said is true, that a great deal can be done for almost every mind. But I think Mr. Brooks, and all of those who have had experience and observation in the management of feeble-minded in our schools, will say that there is a class that is beyond the reach of even the most humane and patient endeavor. Our schools for the feeble-minded always have a large proportion of children that they class as incurable; with whom they admit that they can do absolutely nothing, and can only give them food, drink, clothing, and the physical comforts, and wait patiently for their release from the burden of life.

But there is another class that we have, and I suppose every institution for the deaf and dumb has had experience of. It is a limited class, a class that I admit I have seen but very few of in an experience of nearly thirty years; who seem to have normal intelligence, with bright face, bright eyes, who are quick to learn through signs, and yet who have a defect of hearing, or rather an inability to translate the impressions that the ear receives into speech.

I am reminded of an exceedingly interesting case, which I will send for before this convention adjourns. Some years ago a bright and pretty little girl came to me, who gave no evidence whatever of any weakness, physical or intellectual, but who could not speak. She could hear to a remarkable degree certain sounds. I would say to her in a low tone, "little girl," and she would turn immediately; and would recognize the voice. It was a case that it was conceded that they could do nothing with in the ordinary schools. The father had tried to have her educated in the schools where his other daughters were being educated, but they could do nothing with her; and so she became a pupil at this school. She has come to use language reasonably well for a child, or about as well as children ordinarily do, writes a very pretty letter, and learns her lessons well. And with this development of the mind has come also a development of speech. She is speaking now in all of the phraseology that she has learned, or that she has had reproduced, enough to make a decided impression upon the mind; and she speaks and recognizes all of these words and sentences very well, uttered in a very low tone of voice.

The point I am reaching is this: I believe there is some sort of brain difficulty; that it is not a difficulty of the vocal organs at all; that it is not what we would call ordinary weakness of mind. I believe it is a purely local trouble, something after the manner of aphasia. It has been pretty well ascertained that the loss of speech which sometimes occurs is due to an affection to a certain particular convolution of the brain. Whether medical science will ever trace all of our mental powers to certain convolutions or portions of the brain I am not so sure; but it seems to be pretty well established that the power of speech is more or less affected by the condition of a certain convolution. With this child I am satisfied that all of her speech has come from intellectual development. I do not think that she will ever have fluent and perfect speech. She heard so well that it was thought she ought not to be here; and at one time she was removed from the institution, because she could hear so well. It was thought by some that to have her here was a violation of the law. But she was afterwards readmitted, because she could not be educated elsewhere.

I have had another case that illustrates an entirely different condition. It was a child who could hear as well as I could; who would obey all sorts of orders; who would not say anything, but would answer with a nod of the head almost any question that came within the province of his experience; but a boy that absolutely nothing could be done with. We labored faithfully with that child for three years; yet he never could write a word or letter. Finally I advised his removal to the school for imbeciles. I will try to have that boy here at a future meeting of the convention, to illustrate those two forms of lingual defect.

I think we have enough cases of this kind coming under observation in our institutions to justify a very thorough investigation of the problem to be solved, why it is that these children have this defect. It is not always physical. These are well nourished children. Their condition is not from need of care and attention, but it is, I think, from some local brain difficulty, the secret of which we have not yet discovered, but which is a worthy object of investigation by medical men generally.

DR. LATHAM, of Indiana: At the last session there was mentioned a case of a boy coming to the school, who was apparently active, and learned signs readily but could not learn or write one single word. He could not speak a syllable or learn to write a word; and he remained that way the whole term. He would obey orders given by signs, and do errands, but not a word could he understand to speak or write. And there was a case similar to that, some years before, where a boy could not speak or read, but could learn very well to write language and made commendable progress for two or three years. These cases came under my own observation.

DR. GALLAUDET: A case came under my notice in an institution in charge of the distinguished Dr. Kerlin, and which interested me much. I was crossing through the corridor, and he stopped and spoke to a boy about sixteen years of age, who had an apron upon him and was painting the wood work in the corridor. He conversed with the boy, who answered his questions very readily and was remarkably pleasant and good natured; and I also talked with him a few minutes, and we passed on. Dr. Kerlin said: "I would like to tell you about that boy. When he came here he was about twelve years of age, and his friends informed me that he had never spoken, or that they had never known him to speak. He seemed to understand perfectly everything that was said to him." The doctor said that he examined him very carefully; examined his vocal organs, found there was no defect there, and that he came at length to the conclusion that the simple reason that the boy did not speak was perversity; that he would not; that he had the power to speak evidently, but would not use it. And Dr. Kerlin then told me the process by which he was made to speak, and it was one which well illustrates the very great importance of sending away from their parents children who are under the affliction of feeble-mindedness in any degree, because the process by which he brought this boy to his speech was one which no parent would ever have the heart to resort to. It was the starvation process. The boy was simply starved into speech. Dr. Kerlin had faith that the boy could speak if he would, and he refused him his food until he asked for it orally. The starvation was carried to a certain point, Dr. Kerlin knowing that it was not risking his life or health, and at length the boy asked for bread and meat, and got it;

and in a very short time he was brought into the full use of his vocal organs.

I do not say that that process would prove successful in every case; but it is well enough to bear in mind that this apparent inability to speak is simply indisposition, more or less.

MR. ELY, of Maryland: I would like to mention a case that, while it is not precisely in a line with the cases mentioned by Professor Jenkins in his paper, is somewhat similar. It occurred when I was connected with the Ohio institution some years ago, and illustrates the condition of the brain as affecting the power of speech.

The boy was brought to the institution for the deaf and dumb at the age of sixteen, and had just lost his hearing, and, by a singular coincidence, his speech also. Naturally, of course, the speech would not have been lost, but in this case the speech and hearing were both gone. He remained in the institution for some weeks or months, when suddenly he was taken with violent pains in the head, and his hearing came back and his speech was restored, but he was blind. Not only was he unable to see, but his eyes were closed, and, raising the lids, the eyes were sightless. After recovering from his illness he was transferred to the institution for the blind, and after remaining there for some weeks he was suddenly taken again with severe pains in the head, and his sight was restored, but he was deaf and dumb. That was repeated yet a third time. Beyond that I do not know the history of the boy; but there evidently was a brain affection, transferred perhaps from one convulsion of the brain to another, by which he was alternately made blind and deaf and dumb.

This case excited considerable attention at the time, and was disbelieved by some medical experts, one of whom went to great pains to publish a long letter in the Washington papers ridiculing the whole idea. But the facts are as I have stated them, as can be witnessed by many. Dr. Fay can testify to the correctness of it.

THE CHAIRMAN: In the Illinois institution at this time there are three such cases as have been referred to here—boys who hear perfectly well, but yet cannot be taught to speak. They can be taught to read; they will perform all errands they are directed to, but it is impossible to get them to speak.

PROFESSOR E. A. FAY, of Washington, then read to the convention a paper entitled—

MORTALITY AND VITAL STATISTICS OF TEACHERS OF THE DEAF.

Within recent years there have been but few numbers of the "Annals" in which it has not been the painful duty of the editor to announce the death of one or more loved and honored members of our profession; and sometimes the obituary notices have been so extensive as to cast a shadow of gloom over the whole issue. As I was arranging the necrology of the last number it occurred to me to renew an inquiry which was proposed thirty-four years ago by a former editor of the "Annals,"* but which was then left unanswered from the want of data: *Are teachers of the deaf more liable to disease and death than persons of other occupations?*

The Mortality and Vital Statistics of the Tenth Census of the United States, collected and compiled under the competent direction of John

*Luzerne Ray, *American Annals of the Deaf and Dumb*, vol. IV, pages 154-156.

S. Billings, LL. D., Surgeon, U. S. Army, are much fuller and more complete than those of any previous census, but are still somewhat defective, as is shown by comparing the returns from certain States with statistics obtained in those States from other sources. "The census year 1880-81 was a fair average year as regards mortality," and, making due allowance for the deficiency just mentioned, the census returns may properly be taken as our basis of comparison.

Inasmuch, however, as all, or nearly all, our teachers are between twenty and seventy-five years of age, we must eliminate from the census returns the statistics of infancy, youth, and extreme old age, and take only the portion of the population which is of corresponding years with the subjects of our inquiry. The total population of the United States between the ages of twenty and seventy-five, according to the last census, was twenty-five million five hundred and thirty-two thousand eight hundred and sixty-five, and the number of deaths in the census year between those ages three hundred and three thousand two hundred and thirty-one, giving a proportion of seventeen and nine tenths deaths per one thousand of living population. If we add thirteen per cent, which Dr. Billings considers a fair approximate estimate, for probable deficiencies in the returns, we have twenty and two tenths as the number of deaths per one thousand of living population between the ages of twenty and seventy-five.

The total number of teachers of the deaf in the United States is very small for statistical purposes; we shall therefore obtain more trustworthy results by not limiting our inquiry to a single year, as the census does, but by extending it over as long a time as possible. The longest time for which I have been able to obtain accurate statistics is ten years, and I have accordingly taken the last decennium, 1876-1885, inclusive, as the period for investigation. Even this time is too short, in view of the smallness of our total numbers, to allow of definite conclusions; but the results reached will at least afford some indications of probability, and they may serve as a starting point for more precise and accurate deductions at some future date when the requisite length of time shall have elapsed.

The occupations and mode of life of teachers and Principals (or Superintendents) of schools for the deaf have little in common, and their mortality rates, as will be seen, differ widely; I shall, therefore, make a separate examination for these two classes. The Principals of several small schools who have little or no assistance in the school-room, and whose work is consequently instruction rather than superintendence, are included among the teachers; the other Principals and Superintendents are considered separately.

The mean annual number of teachers (not including Principals) during the decennium under review, was three hundred and ninety-five; total number of deaths, thirty-nine; mean annual number of deaths, three and nine tenths, being at the rate of nine and eighty-seven hundredths deaths per thousand teachers. This result, giving a mortality rate less than one half that for the whole population of the United States between the same ages, is surprising; especially must it be so to those who have been wont to believe, as has been maintained by one or two writers in the "Annals," that the occupation of deaf mute teaching is peculiarly wearing, both physically and mentally, and that it tends more than others to undermine the vigor of the system. It is true that the occupation is a laborious one. During the hours of school the faithful teacher of the deaf—especially

with a class of young children—works as hard as any one can or ought in any kind of employment. He must give some time out of school also to the preparation of his lessons, and in some institutions to supervisory duties. On the other hand his real, hard, confining work is, in most cases, only for five hours a day, more or less, and only on five, or five and a half, days in the week; while his summer vacation of about three months affords him a much longer period of rest and recreation than falls to the lot of most workers. Our profession has the further advantages that we are free from the feverish excitements and harassing anxieties incident to the severe competitions and fierce rivalries of many employments; our salaries, too small though they often be, are regularly and promptly paid; we have comfortable and healthy homes; we live, I trust, temperate, moral, domestic lives. Considering these favorable circumstances, and remembering that the census returns include persons engaged in the most dangerous and unhealthy occupations, the dwellers in crowded cities and filthy tenement houses, the inheritors of fatal tendencies to disease, and the intemperate and vicious who bring disease and death upon themselves, it is not strange that our mortality rate is below the average. Still, some further explanation seems necessary why it should be so far below. There are no data for the comparison of death rates of different occupations in the United States, but in England, where statistics of this kind have been collected, no occupation has a rate of mortality so low as ours. The nearest approach to it, according to the latest returns on the subject,* is that of clergymen, who have ten and twenty-eight hundredths deaths per thousand living between the ages of twenty-five and sixty-five; between the ages of twenty and seventy-five the number would be considerably higher, on account of the large increase in the proportion of deaths between the ages of sixty-five and seventy-five. Next to clergymen, in England, agriculturists enjoy the lowest death rate; schoolmasters rank fifth on the list, having a rate of thirteen and twelve hundredths per thousand living between the ages of twenty-five and sixty-five. The death rate for all males in England between those ages is seventeen and seventy-two hundredths per thousand living.

Dr. Billings in conversation has suggested to me one fact which vitiates the results of the mortality statistics of school teachers generally, viz.: that many teachers do not remain in the work permanently, but abandon it for other occupations. This does not apply so much to teachers of the deaf; and, moreover, our returns include all deaths, within the past ten years, of persons who have been teachers of the deaf at any time within that period, even though they may have retired from the profession some years before their death.

Possibly, however, the extreme lowness of our death rate is due to the probable fact that the mean average age of our living teachers is less than the mean average age of the general population between the ages of twenty and seventy-five; for it is a universal rule that the death rate of any group of adults increases with its mean average age. Unfortunately I have no statistics of the ages of our living teachers; but inasmuch as our numbers have increased rapidly with the growth

* William Ogle, M.D., Supplement to the Forty-fifth Annual Report of the Registrar-General of Births, Deaths, and Marriages in England. London: Eyre & Spottiswoode, 1885.

of our schools within the last thirty years, rising from seventy-five in 1857 to four hundred and seventy-six in 1885, and the additions to our ranks have consisted chiefly of *young* men and women, it is probable that our mean average age is now less than that of the general population between the same extremes of age. I hope at some future time to obtain statistics of the ages of our living teachers, that we may know what proportion of our exceptionally low death rate is due to the nature of our work, and what to the exceptional lowness of our mean average age.

Of the causes of death I have returns in thirty-seven cases, as follows:

Dysentery.....	2
Enteritis.....	1
Malarial fever.....	2
Typhoid fever.....	2
Debility.....	1
Old age.....	4
Consumption.....	10
Cancer.....	3
Tumor.....	1
Cerebral meningitis.....	1
Apoplexy.....	1
Congestion of the heart.....	1
Pneumonia.....	4
Calculus.....	1
Necrosis of the skull.....	1
Eczema.....	1
Suicide.....	1
Total.....	37

One case, also, is reported of death "from a complication of physical maladies, aggravated by hard school-room work."

The only one of these diseases that calls for special notice is consumption, the ten cases of which form an unusually large proportion of the whole number. The proportion of deaths assigned to this disease in the United States census returns was one hundred and sixty-six and sixty-two hundredths per one thousand total deaths; and that included the deaths at all ages. Our statistics give a proportion of two hundred and fifty per one thousand deaths between the ages of twenty and seventy-five. No doubt this large proportion is partly due to the fact that there are some diseases causing many deaths in the general population, as for instance those resulting from the alcoholic habit and those connected with maternity, from which teachers of the deaf are almost if not entirely exempt; but this is probably not sufficient to account for it wholly. May it not be that the inhalation of crayon dust is one cause of the large number of deaths from consumption. English statistics show that of persons engaged in dust-inhaling occupations—such as workers in cotton and woolen factories, cutlers and file makers, stone masons and bricklayers, Cornish miners and pottery makers—a much larger proportion die of consumption and diseases of the respiratory organs than of the general population. Mineral dust, especially the dust of stone, is peculiarly fatal. Among Cornish miners and pottery makers the mortality from lung diseases is almost three times as great as among average males, and it is five or six times as great as among fishermen, who are free from exposure to dust. For workers in chalk we have no returns; probably chalk dust, being softer and more rounded, is less deleterious than some other kinds of mineral dust, but it is hard and gritty

enough to be irritating to weak lungs, and there is often a good deal of it floating in our school-rooms. Slate or lead pencils should be used in preference to chalk whenever feasible. Since crayons cannot be dispensed with altogether, those kinds should be chosen which are least productive of dust; crayon writing should be erased carefully and gently, and at recess or after school rather than during school hours, and erasers, by frequent cleansing in the open air, should be kept as free from dust as possible.

I have the ages of thirty-eight of the thirty-nine who have died. The two youngest were twenty-one years of age; the three oldest, seventy-four; the mean average age was forty-four.

I have also obtained statistics of the teachers who during this decennium have retired from the work of deaf mute instruction temporarily or permanently on account of ill health. They are thirty-three in number, and the causes of their retirement in thirty-one cases are as follows:

Nervous prostration.....	8
Consumption.....	6
Weakness of lungs.....	3
General debility.....	3
Accidents.....	3
Old age.....	3
Insomnia.....	2
Insanity.....	1
Cancer.....	1
Rheumatism.....	1
Total.....	31

Nine of these have since died, and eight of them are included in the statistics of death above given; the ninth died during the year 1886, which does not come within the period of investigation. Thirteen have recovered, and of these ten have returned to the work after a rest of from two months to two years. Three are still invalids. With respect to the remaining nine, I am not informed of their present state of health. Five of the thirty-three were in delicate health, one of them a confirmed invalid, when they began teaching. The nervous prostration of three of the eight thus afflicted is attributed to overwork in teaching. One case of insomnia, which resulted in suicide, was due to overwork outside of the school-room, in a direction entirely apart from that of the profession. In the case of the one who became insane, the disease was hereditary. The three accidents had no connection with the duties of instruction nor with institution life.

We have no statistics whatever of other occupations with which to compare these cases of retirement from work temporarily or permanently on account of ill health, but we know that in all occupations there are many such instances. While their occurrence among teachers of the deaf illustrates the truth that it is impossible for one to continue in the work who does not enjoy good health, they are probably not sufficiently numerous to indicate that the profession is unhealthy or peculiarly wearing to the nervous system.

The mean annual number of male teachers was one hundred and sixty-eight; of female teachers, two hundred and twenty-seven. The number of male deaths was twenty-four, which is at the annual rate of fourteen and twenty-eight hundredths per one thousand living; the number of female deaths was fifteen, or six and seventy-eight hundredths per one thousand living. This gives a very much higher

death rate for male than for female teachers; but the difference is perhaps to be explained, to a considerable extent, by the fact that the average age of living male teachers is probably greater than that of female teachers. As already stated, I have no statistics of the ages of our living teachers; but inasmuch as the employment of ladies in the work has only recently become common, their average age is probably considerably less than that of the male teachers. The steady increase in the proportion of lady teachers since 1851 is shown by the following table:

YEAR.	Number of Male Teachers.	Number of Female Teachers.
1851.....	49	3
1857.....	61	14
1868.....	93	50
1875.....	139	134
1885.....	176	300

The average age of the male teachers at the time of death was fifty-three; of the female teachers it was thirty-one. If there is as much difference in the average ages of the living male and female teachers it is, perhaps, sufficient to account for the difference in the death rates.

The number of male teachers who gave up teaching temporarily or permanently on account of ill health was ten; of female teachers, twenty-three; indicating that a smaller proportion of women than of men find their health and strength equal to the work. The three cases of accidents, however, and four of those who were in delicate health when they began teaching, were ladies. If we deduct these seven from the twenty-three, the numbers are rendered more nearly equal, though considerable disparity still remains.

The mean annual number of deaf teachers was one hundred and thirty-two; total number of deaths, fourteen; annual proportion of deaths per one thousand living, ten and sixty-six one hundredths. This is a slightly higher death rate than that of the hearing teachers, which is nine and five tenths, but it is very much lower than that of the whole population of the United States for the same ages; and, so far as it goes, indicates that those life insurance companies which decline to insure the deaf, on the ground of their greater liability than the rest of the community to accident and disease, are in error. The average age of the deaf teachers who died was forty-one. The number of deaf teachers who gave up the work temporarily or permanently on account of ill health was only three; a very much smaller proportion than that of hearing teachers. The causes of the deaths of thirteen deaf teachers were as follows:

Dysentery.....	1
Enteritis.....	1
Debility.....	1
Consumption.....	4
Cancer.....	2
Pneumonia.....	2
Calculus.....	1
Necrosis of the skull.....	1
Total.....	13

If we had the requisite data, it would be interesting to determine whether, as has been on the one hand asserted, and on the other con-

troverted, in the "Annals," the work of articulation teaching is more laborious and wearing than teaching by the manual method. Unfortunately there are no statistics to show exactly the mean average number of articulation teachers during the decennium. We learn from the tabular statement prepared by Miss Rogers, and published in the Sixteenth Annual Report of the Clarke Institution, that in 1876, the first year of our period of inquiry, there were not more than seventy-eight articulation teachers, and probably the number was less than that. In 1883, according to the same authority, there were one hundred and twelve. In 1885, estimating from the number of pupils taught articulation, there were one hundred and thirty-four. Probably one hundred is not far from the mean average number for the decennium. There were five deaths of articulation teachers, giving the extremely low annual death rate of five per one thousand living—a rate less than one half that of the manual teachers, which is eleven and eighty-seven one hundredths, and one fourth that of the whole population of the United States. Articulation teaching may be wearisome, but according to these statistics it cannot be regarded as fatal.* It should be remembered, however, that oral teaching is comparatively a recent work in this country, and that the mean average age of articulation teachers is probably less than that of any other group under consideration.

Of the thirty-three teachers who retired from the work temporarily or permanently on account of ill health, twelve were articulation teachers, apparently a large proportion; but among them are included the three cases of accidents, two who were invalids when they began teaching, and one who became ill from a cause that had nothing to do with the school-room. If we deduct these six, the proportion remains nearly the same as that of the manual teachers.

We now come to the Principals and Superintendents of our schools for the deaf, and here, I am sorry to say, I have no longer pleasant and reassuring statistics to offer. The mean annual number of Principals and Superintendents was forty-nine; total number of deaths, fourteen; annual number of deaths per thousand living, twenty-eight and fifty-seven hundredths, a proportion more than two and a half times as large as that of our teachers, considerably larger than that of the whole population of the United States, and surpassed in the English statistics only by those of the most unhealthy and deadly employments. The only consoling circumstance I can suggest is the untrustworthiness of all deductions drawn from such small numbers. I hope and trust the statistics of the future will show a much lower rate. Still, I do not think it can be expected to approach that of the teachers in lowness, for the duties of the office make a much severer demand upon the vital powers. The Principal is and ought to be responsible for the intellectual, moral, and industrial training of the pupils; their care and treatment in health and in sickness; the selection of teachers and other officers; the representation of the institution before the public, and the obtaining of means for its support from the Legislature; the correspondence with the parents of pupils and others, including the statistic fiends of the Bureau of Educa-

*Since this paper was read I have been informed that in the case of one articulation teacher, the cause of death, as given for official record by the physician in attendance, was "brain fever and paralysis of the throat, caused by overwork in teaching articulation." The cause of death named to me in the first instance was "cerebro-spinal meningitis," and it is so recorded in the foregoing tables.—E. A. F.

tion, the Census Office, and the "Annals;" the petty and vexatious details of daily administration; and many other items too numerous, perhaps too trivial, to mention, but which taken altogether impair his strength and wear away his life. Happy, too, are the Principals who escape wholly the jealousies and rivalries of subordinates; the suspicions and interferences of individuals in the Board of Management; unjust censure from the public press; unfair investigation; cruel condemnation, or unsatisfactory vindication. All these things make up a burden of responsibility and anxiety which few men have the strength to carry for a long time. The wear and tear of such a life is too great; the vitality becomes exhausted; disease and death find an easy conquest. Perhaps the case is one that admits of no remedy; still I venture to make a few suggestions which, if followed, would, I think, tend to lower the death rate of Principals.

1. Let no person accept the office who does not possess an unusually strong constitution.

2. Let the Principal refuse to be annoyed with *unnecessary* petty details. Why, for instance, should he sell postage stamps to teachers, when they can be bought at the same price at the Post Office, and a walk thither is just what we all need for our health before or after school?

3. Let him, when he begins to be weary—nay, sometimes without waiting for that—even in term time, take an entire rest for days or weeks from his usual duties, and in change of scene and life recruit his health and strength; and to this end let him have among his assistants at least one person who, possessing his entire confidence and being otherwise well qualified, can take his place; so that, during his absence, with a little unusual help perhaps from the other officers, the wheels of the ordinary routine will move almost as smoothly as when he is at home.

4. Let the Principal have a residence, or at least a dining-room, separate from that of the institution. His presence in the pupils' dining-room at certain times is doubtless desirable, but let him take his own meals with his own family in peace and quiet. This may seem a little thing, but its importance cannot be overestimated.

The causes of the deaths of twelve Superintendents and Principals were:

Erysipelas.....	1
Consumption	2
Cancer	1
Apoplexy	1
Paralysis.....	1
Congestion of the brain	1
Pneumonia	3
Disease of the kidneys.....	2
Total.....	12

The mean average age of ten of the Principals who died was forty-nine, which is four years younger than that of the male teachers, though comparatively few men are appointed Principals under the age of thirty.

Six Principals, besides those who died, were compelled by ill health to retire temporarily or permanently from active labor during the decennium. Three of these were restored to health by rest from work, aided in one case by foreign travel and in another by change of residence, and returned to service; a fourth expects to resume

labor this autumn. "If I had not stopped work," writes one of the strongest, "I have no doubt I should have gone to my grave or an insane asylum."

The following table summarizes the statistics of deaths, and retirements on account of ill health, above presented:

	Mean Annual Number between Ages of 20 and 75.	Number of Deaths.	Annual Number of Deaths per 1,000 Living.	Average Age at time of Death.	Number Retired Temporarily or Per- manently on account of ill health.	Annual Number of Retire- ments per 1,000 Persons.
United States	25,532,865	(1 yr.) 303,231	20.2	-----	-----	-----
Teachers of the deaf	395	(10 yr.) 39	9.87	44	33	8.38
Male teachers	168	(10 yr.) 24	14.28	53	10	5.98
Female teachers	227	(10 yr.) 15	6.78	31	23	10.17
Hearing teachers...	263	(10 yr.) 25	9.5	44	30	11.41
Deaf teachers	132	(10 yr.) 14	10.66	41	3	2.37
Manual teachers ...	(Estimated) 295	(10 yr.) 35	11.87	45	21	7.13
Articulation teach- ers	(Estimated) 100	(10 yr.) 5	5.	36	12	12.
Principals and Su- perintendents	49	(10 yr.) 14	28.57	49	6	12.24

In conclusion, I have to thank the Principals and Superintendents who, at a time when they were unusually busy with labors relating to the closing of school, have given me the information upon which this paper is based. Some of them have kindly added suggestions of further subjects of inquiry, as with respect to the length of terms of service, marriage statistics, etc., but they came too late for my present purpose. If any one wishes to go into marriage statistics I will give him, as an encouraging item to begin with, the fact that one Principal informs me that he himself and five of his teachers were all married within one year, and none of them have regretted it yet.

MR. BROOKS: Mr. President, if I understand the first part of the paper which has been read, the conclusion from it is this, drawn from the census of the country, that there is a smaller mortality among the teachers in the deaf and dumb institutions of the country than among the general population of the country. The average of deaths in the country is a fraction over twenty in a thousand. And I wish here to state, as a Commissioner of Health of the State of New York, and one who has given some attention to the subject, that the average mortality of a country, with the means of securing healthy sewerage, drainage, and ventilation, ought not to exceed fifteen in a thousand. And, from study and observation, I have come to the conclusion that the proper lifetime of a man or woman, instead of being what is called sorrow if you reach threescore and ten, ought to be at least one hundred years. And there are abundant evidences in the

world that a proper mode of living will enable persons to arrive at that age.

England has been alluded to. I know of two districts in England, corresponding precisely in character, geographically and materially, where the death rate in one is fifteen in a thousand, and in the other twenty-two or twenty-three in a thousand. What causes that great difference? Simply the absence of proper drainage, proper ventilation, proper sewerage, and proper care of the life of the people. I am associated with an institution in the City of New York, known as "The Nursery and Child's Hospital," and have been so connected for a great many years. It was established by a benevolent lady, who was following the custom of the time, and who, perhaps, from her own physical disability, invited a wet nurse to take care of a child to which she had given birth. In the process of time she found this hired nurse in great sorrow and trouble, and asked her the reason. "Have you not every comfort in my home that any of my family have? Have you not everything that would add to your comfort?" "Everything," she answers; "but while I am giving nourishment to your offspring as a hired nurse, I am neglecting the child to which I myself gave birth;" following the custom too prevalent in a great many parts of the country, though there may be reasons for it. And that incident led to the establishment of the institution to which I made allusion, where the mortality of children of that class, under the care of the City Government, was from eighty-seven to ninety-seven per cent every year. Such was the care which the Government gave to the children of poor people in the great metropolis of New York. And the facts there corresponded with the facts in other parts of the country. And the incident which I have alluded to, led, first to the transfer of the child of the wet nurse to her own home, and then to the establishment of this institution, where the mortality to-day, instead of being from eighty-seven to ninety-three per cent, is less than fifteen per cent in the city, and less than seven per cent in the country branch of this institution.

This is one fact in regard to this great question, and I think there is none more important for us to discuss than what may save the lives of the people, young and old. And I present it, therefore, with the greatest emphasis I can command, when I say that the proper ventilation, and the proper drainage, and sewage, especially of public institutions, is the one great primary fact in the discharge of what I consider a great public duty.

There is another important fact drawn from the statistics of the country. We have imported into this country, directly, nearly ten millions of people born abroad; and every one of those human lives, taking an average of the good and the bad, and the worst, possibly, the money value of each one of those lives is \$1,000. And that is how the sickness of any number adds largely to the general expense. Physicians' fees, and absence from and inability to labor, and many such causes, add enormously to the general expense of the community, and to the general absence of that physical and personal economy that is necessary to the welfare of the State.

Now, I wish to dissent from my friend in one respect, and that is in regard to the hard work of teaching. I have had some experience of that in my early life, working in one of those old-fashioned primary schools in Massachusetts, where the law was that I, in common with others, should teach boys six hours a day, and girls two hours a

day. I have survived all that, and lived to a pretty good old age, with no better constitution than the average man. In my own occupation, for forty-one consecutive years drilling in one rut, in a much harder occupation than school teaching, I was enabled to work diligently ten and a quarter hours a day for every school day in those forty-one years [applause]; and, as a rule, I do not believe that one man in a million ever died from hard work, either in teaching, in mechanical work, or in any other occupation.

The greatest blessing the Lord ever gave to mankind was when he sent him forth with the admonition and the instruction that he was to earn his daily bread by the sweat of his brow; that the punishment for the crimes and errors committed is one of the greatest blessings visited upon us. In the institution which I represent here, the teachers, upon receiving additional pay, teach eight hours a day; and I do not think we have had a single mortality in consequence of that fact.

DR. GALLAUDET, of Washington: I feel sure that I speak for many here present whose duty it has been to manage affairs of institutions for the deaf; and when I rise to give thanks to my friend and colaborer for the very sympathetic and discriminating presentation which he has made of the burdens and labors that rest on the head of an institution, and I am glad to take this opportunity to say, if I may be allowed to speak personally, that it has been because our worthy editor of the "Annals" had, from time to time, devolved upon him temporarily the duties and the responsibilities of the management of an institution, that its head overburdened and overborne by cares might have that needed rest, for a longer or shorter time, that he might recuperate the powers and strength that were waning, that Professor Fay has learned to speak so decidedly and so clearly of what are the cares and burdens of the Principal, and how they may be lightened by those who are near him. And I return here, publicly, my sincere thanks and acknowledgments to him that I have been able to go away from my cares and to go with the feeling that they were in good and safe hands, that I have been able to hold my strength and vigor as I have. Often I have gone away from Washington and left Professor Fay as the acting President of the institution there, and left everything there behind and gone away with the freedom of a boy to regain health and strength for renewed labors. [Applause.]

MR. MOSES, of Tennessee: I think we are certainly all under obligations to Professor Fay for giving us in such a satisfactory way the collection of statistics that are certainly to be valuable to all connected with this work. While he has probably made apologies enough for the allowances that must be made on account of the short time which these statistics cover, and the small number of persons they embrace, still we all know that those are important factors in considering statistics. We can take a census report and prove almost everything by it; at least that has been my experience, where we take a small number of persons and covering but a small number of years.

I do not believe that the deductions made by Professor Fay to-day will hold good in the future. But I believe he has made a good beginning, and has given us a basis which year by year will be added to, and will make this subject clear. For one I know that the teaching of a class of deaf mutes is among the most laborious kinds of

work that can be engaged in. I can work ten or twelve hours a day in the field and not be so much fatigued or suffer so much nervous prostration as I do from five solid hours' work in the school-room. And I have had experience of that, sir. I taught for ten years, and went from school teaching into other work, in which I averaged more than fourteen hours a day of hard work and with severe exposure, and I was a stronger man at the end of three years that I was out of the school than when I left the school and went into that work.

I will not enter a comparison between the Principal and the teacher, for some of the overburdened Principals here might say I was not attending to the Principal's work as I should. But I do say that the work of teaching, if faithfully and earnestly followed, is as trying to the nervous system as any that I have ever been acquainted with, and I have engaged in several kinds of hard work. And I believe that it will be found after awhile that the teacher who earnestly and faithfully does his school-room work is entitled to as much consideration, and is making as much sacrifice for humanity and for his work, as any man engaged in any work and any profession. [Applause.]

MR. BROOKS: I omitted a single fact which I desired to state. In the New York Institution for the Deaf and Dumb the man who provides the food, the coal, and the necessary support of the institution, is not the Principal of the institution. I am neither speaking as a Principal nor as a teacher now, but as a man who has been a Director of the institution for thirty years. I have held that the Principal of an institution should have control of the educational department of that institution, and be, if possible, wholly exempt from those material things which belong to the buying of beef, pork, mutton, butter, coal, and all those material things. What relation have these things with the proper education of the deaf and dumb? Every Superintendent should have such assistants as will exempt him from all of these severe labors, which relate to the material part of the institution, and are as far from the educational department as they could possibly be. I believe in the complete separation of what belongs to education and what belongs to material things. We have followed that practice in our institution. I believe in the complete separation of those two departments of service.

MR. JENKINS, of New Jersey: I think that the subject alluded to by the last gentleman is hardly germane to the subject of the paper. I merely make this suggestion because I do not desire to have it inferred that the silence of his audience implies entire acquiescence in the proposition laid down by him. But the subject may very likely come up for discussion at another time of the convention.

The following paper was then read by MR. JAMES DENISON, of Washington, D. C., upon—

THE MANUAL ALPHABET AS A PART OF THE PUBLIC SCHOOL COURSE.

In some English magazine I remember reading a few years ago a story to the following effect:

A burglar, intent upon robbery, had obtained entrance to a bedroom, where the lady of the house, awaked from sleep by the noise of his movements, was intimidated from giving an alarm by his fierce threats of violence. Hearing footsteps approaching, the robber concealed himself behind the bed, first cautioning the occupant

that the least whisper of his presence would be at the risk of her life. The husband entered, unsuspecting of the fact that from his place of concealment the robber, with leveled pistol and finger on trigger, was breathlessly watching and listening. The situation was full of peril, more easily imagined than described. The least allusion to the truth might have been instant death to the beloved husband, and probably to the wife also. Now, it had happened that, in their younger days, they had learned the manual alphabet of the deaf, and had frequently since, as occasion suggested, communicated with each other by it. Unseen by the robber, the lady gave her husband, on her fingers, an inkling of the state of matters. He took in the situation at a glance—literally at a glance—and making a misleading remark about something he had forgotten to bring, he was out of the room and in a moment back again with firearms and assistance, and the burglar was captured, and robbery and possible murder prevented; and this by the manual alphabet, an accomplishment easily and carelessly learned years before, with no thought of its future employment in such an emergency.

This case, extreme as it may seem, only illustrates the general rule that in daily life circumstances are constantly arising in which there is an imperative necessity of saying something directly to the person most interested in a way not to attract too greatly the undesired attention of others, and of saying it quickly, perspicaciously, felicitously, without using the voice.

Writing is a medium of communication that answers these purposes at certain moments and on certain occasions. It is undoubtedly an indispensable medium where distance, exactitude of statement, future reference, extent of matter are to be considered. There is no need of enlarging upon this phase of its usefulness; it is universally acknowledged.

There are indisputably times and places in which the finger alphabet fulfills, as writing cannot do it, the conditions of expression where vocal utterance is either not desirable or not possible; where to use pen or pencil would be either an inconvenience, a waste of time, or a sheer impossibility.

How often at social gatherings—I am not alluding to the deaf in this connection—do we not see individuals, separated from each other by the crowd or the length of the room, vainly striving by bewildering contortions of the countenance or noddings of the head to convey a piece of information upon which may hinge the ease and pleasure of the evening. Repeatedly it must have occurred to the looker-on as he noticed the mortification or blank disappointment depicted upon their faces at the futility of their attempts to reach a common understanding, that the finger alphabet would have furnished them with a means of perfectly accomplishing that object without attracting undesirable attention by uncouth gestures or obliging them to make themselves conspicuous by raising the voice beyond the proper pitch.

Probably no one has ever left a promiscuous gathering of any kind without recalling an unfortunate moment made so by a lapse of memory or some misinformation as to the name, identity, or profession of a person interviewed, where the use of the finger alphabet on the part of a kindly disposed third person would have saved him from an awkward blunder.

In concerts where music has charms to still every other sound; in

the church where any other voice than that from pulpit or choir would shock the congregation from center to circumference; in the theater where the owner of a voice in orchestra or gallery finds himself the focus of a hundred lorgnettes, and again amid the noise and rattle of the machine shop, factory, or railroad, how often arises an imperious necessity of making a communication to another. How handy—old Saxon word this, but pat to the purpose, is it not?—how handy, at such times and in such places would come the manual alphabet, achieving the end sought for completely and without the least friction or disturbance.

Outside of the confessedly deaf, how many persons there are, who resenting with warmth the imputation of not being the possessors of a perfect auditory apparatus, are yet hardly ever addressed except in tones more or less raised above the conversational pitch. Often in certain situations the recollection of the fact that the voice must be thus heightened is an effectual preventive of anything being said at all. Thus timely, pleasurable, or valuable information has been withheld when the finger alphabet could and would have put it where it would have done the most good.

To the invalid and to the sick-room the manual alphabet comes, as it were, with healing on its wings. Has not every home its sick-room dedicated to the Goddess of Perfect Quiet; every family its invalid, a sort of living original of the marble statue of Silence, with finger forever on lip? How the sound of the human voice, be it ever so modulated and repressed, racks the ear of the nervous sick one. How the whispers of the nurse or the subdued tones of the physician startle him from the repose upon which his recovery depends, and turn his thoughts into channels that lead to apprehension and despondency. How perfectly, how beautifully, the manual alphabet performs its functions here; every weary nerve in the sufferer's body cries out, "God bless it." And again, on the other hand, when the invalid is incapacitated by disease or exhaustion from using his voice, what a solace to him and his attendants it is if he can still express his wants by the silent unlaborious motion of his fingers.

In this connection it is not out of place to refer to a more solemn subject—that of the deathbed. Some of you who have stood by the dying ere the soul had taken its flight, may recall—and with what feelings I will not say—that last appealing look and those vain endeavors of the departing one to express some final desire. It is a well known fact that the vocal chords give way long before the muscles of the hand; the dying man is "speechless," while his fingers move at will. How many last messages to be treasured thenceforth as a most precious heritage have been lost to the loving ones remaining behind; lost because the finger alphabet was not known.

Members of the family of Dr. Thomas Hopkins Gallaudet have told me that in his last moments such precious and ever to be remembered messages continued to come from his fingers after his tongue was paralyzed in death. The same may be said of the Rev. B. M. Fay, father of Professor Fay, of Kendall Green, who passed away last year; of Grace Aguilar, known to us through her "Days of Bruce," "Home Influence," and other writings, of whom the "Annals"* says: "In her final illness, when the power of speech was gone, she conversed with her friends in the manual alphabet, and her last words

* Vol. XVII, page 132.

thus expressed were: 'Though He slay me, yet will I trust in Him.'" Dr. Harvey P. Peet, in an obituary notice of Martha Dudley in the same periodical,* states the same fact as regards her last hours, and mentions at the same time how "Mrs. Peet, after she became wholly speechless, spelled with her fingers distinctly the word 'Mother,' which incident is commemorated in a touching little poem of Mrs. Sigourney, 'The last word of the dying.'"

Thus far I have mentioned only a tithe of the circumstances in which a knowledge of the manual alphabet would be an advantage—I may say, an immeasurable advantage—to hearing people. A moment's thought will suggest to any one so many further illustrations to the same effect, that there would not be space or time to mention them all.

I must, however, mention one more. The finger alphabet possesses acknowledged, and, in the opinion of those familiar with its use, an unequalled excellence as a means of education in orthography. The care and deliberation with which the letters are formed, and the concentration of mind that the process involves, insure precision beyond any other method.

At Kendall Green, and possibly at other places similarly situated in regard to schools for the deaf, where the hearing children of the locality are formed into little schools for private instruction, the finger alphabet has been practically and successfully tested in this respect. The teachers like it. "It makes the pupil so particular," they say. I have in mind now children of deaf parents, early used to this alphabet, who on entering public schools easily led their classes in spelling, to the wonderment of their teachers until the reason was explained.

Once more I have recourse to the "Annals":† "It was a favorite idea of the late Rev. T. H. Gallaudet, the lamented, illustrious pioneer of deaf mute education in this country, that the practice of spelling words with the manual alphabet, even by hearing and speaking children, might be made very serviceable to them, by familiarizing them with the correct orthography of words aside from the use of the ear. The principle upon which the idea is based we think to be this: The more varied the form under which language is presented to the mind through the different senses, the more perfect will be the knowledge of it acquired, and the more permanently will it be retained."

In view of the incontestably great usefulness of the manual alphabet to the hearing, and considering the comparatively little labor and time needed to acquire it, has not the day arrived when some determined effort should be made to adopt it into the public school system of the country? Should not this matter be urged upon the attention of teachers and Boards of Trustees of the public schools? Could not they be persuaded to hang charts of the manual alphabet on the walls of their school-rooms, with cuts large enough to be seen without effort from the farthest corner? Could not they be led to try the experiment of using this alphabet as a means of drill in spelling, instead of the present method of writing out long lists of words? The same course, by the way, might be found useful in recitations in geography.

Would not the school-room work move on in smoother grooves,

* Vol. V, pp. 78-83.

† Luzerne Ray, "Annals," vol. V, page 28.

with less jar to nerve and temper, if a pupil instead of speaking aloud and thus distracting the attention of others from their studies, simply spelled out on his hand a request or a question to the teacher? Would not the teacher himself feel more satisfaction in making a remark to a pupil in this way, having once caught his eye, than in interrupting the work of a whole class to do it?

The objection may be made that the result would be a demoralization of discipline; that pupils will have still another means of talking in school regardless of rules. To this, it might be answered, that there will always be more or less of this unauthorized interchange of ideas in every school-room; and that if it should be carried on through the finger alphabet there would be less disturbance than if any other medium were employed. But in truth, the teacher possesses a check on the abuse of the manual alphabet, in the fact that he is himself skilled in its use, and can tell what his pupils may be saying. A teacher in the high school, at Washington, informs me that all unlawful attempts of this sort ceased at once when his pupils found that their remarks were no riddle to him.

In keeping this matter within legitimate bounds, everything of course depends upon whether the teacher has tact, influence, character. Lacking these qualities, he has no right to be where and what he is. With them, he is sure of commanding the respect and obedience of his pupils for whatever regulations his judgment may lead him to make. Where the manual alphabet is employed, as it is in schools for the deaf, its use is under proper control. Why need the case be different elsewhere?

If, thus far, I have failed to expatiate upon the benefit—great beyond conception—that the introduction of the manual alphabet into the schools of the hearing would confer upon the deaf mute himself, it is because this is something that need only to be suggested to be recognized in all its force and extent. When we think how the general use of the manual alphabet would throw wide open the doors of communication between the deaf mute and the hearing—doors that now open with difficulty and close again almost as soon as opened; when with the mind's eye, we see the deaf child's intellect and heart unfolding from tender years in the sunlight of knowledge, under conditions more analogous to those of his hearing playmate; when we behold the deaf adult, wherever he finds himself, whether in places of business, in political meetings, in religious assemblies, in social gatherings, placed in perfect unison with his neighbors and surroundings; when we realize that he moves among his peers with no feeling of isolation; when we know that there may be more instances than heretofore in which "the charm of warming hands," but without the evil taint of the charm that Vivien wiled away from Merlin, shall knit together for life the heart of the deaf and that of the hearing, how can we as members of our noble profession, hesitate to give our vote, individually and collectively, for the general diffusion of the manual alphabet through the public school system of the country? No; let us not hesitate; let us not even doubt.

"Our doubts are traitors,
And make us lose the good we oft might win,
By fearing to attempt."

REV. DR. THOMAS GALLAUDET: I shall never forget the pleasure that beamed upon the faces of several deaf mutes in the fall of 1853,

when I met Rev. Bishop Wainright in the beginning of our enterprise in New York, when he held confirmation there, having confirmed some six or eight deaf mutes that afternoon, and as he finished the service stepped down and spoke in the manual alphabet, which he had learned as rector of Christ's Church, Hartford. A perfect thrill of joy went through that community as the Bishop came down, shook hands and spelled with them. And I remember an invalid lady of New York who took a particular fancy to my wife, a deaf mute, who learned the alphabet, and just at the end of her life she spelled the word "water."

PROF. E. A. FAY: In this connection I will call the attention of the members of the convention to a little volume giving the manual alphabet, and in which one whole page is devoted to each letter. It has recently been published by my friend and colleague, Professor Gerdon, who I am very sorry is not able to be present. This book presents the manual alphabet in such an attractive and beautiful way that I am sure that any children in whose hands it is placed will not fail to learn it and be improved by it; and our object would be much promoted if this little volume could have a wide circulation among hearing persons.

MR. BOOTH: As a teacher, it is ever my purpose to enlist in the work of teaching my class everybody that I can outside of my school-room and outside of the institution. [Applause.] And to this end I have made it my practice, at the end of the school year, to give to my class and distribute among them, as many as I could afford to purchase, cards upon which are printed the deaf mute alphabet. Two years ago I procured a number of illustrated cards, printed and prepared by Armes & Co., of Philadelphia; and they were of sufficient value that my pupils when they went home could use them making presents to their friends. Being of intrinsic value and beautifully illuminated and lithographed, their friends appreciated them sufficiently to put forth some effort to learn the alphabet. So, in that way, also, the most of my intimate or their intimate friends learned the alphabet, and were able to communicate with them; and thus my pupils also enlarged their circle of acquaintances, perhaps. They certainly enlarged the number of pupils with whom they could converse freely. The end that I aimed at was that these people might assist me in teaching my class language. And I submit that there can be no better way than by conversing on subjects that interest my pupils, and that will bring into use language which will not be used generally in routine school work.

MR. T. L. BROWN, of Michigan: The papers which have been read have filled me with great pleasure, and I think that others have also been pleased. Hearing people may not care to learn the alphabet until shown the importance of it; and we should think what inducement we can offer them to learn it. I think a committee should be appointed to write out these reasons.

In a machine shop, amid the noise of machinery, where a person speaking could not be heard, they could use this alphabet with advantage. So, on the railroad, they could spell a message at a distance. I think a committee should be appointed to write up the subject and put it in the "Annals," making some allusion to this subject in the reports of the different institutions, and giving all the reasons. I do not believe in peddling these alphabets, but in giving them away freely, so that the people can get them. Deaf mutes themselves must

enter into the use of the manual alphabet with their friends, and not stand back and be diffident about it. I hope that the time will come when there will be few that do not understand the manual alphabet.

A deaf mute going into a store, it takes a long time to write out all his wants. If the clerk of a store understands the alphabet, then that would draw deaf mutes into the store and thus increase their trade. That would be another inducement for people to learn the alphabet. [Applause.]

REV. JOB TURNER, of Virginia: In my moving around in the Southern States I meet a great many people that use the double-handed alphabet. I find that to be quite a universal custom. As this is the case, I think that in the different institutions for the deaf and dumb the pupils ought to learn the double-handed alphabet also, so that they can converse with all. I think they should have practice in both, so that they can have the pleasure of such communication.

DR. GALLAUDET: In this connection I will say a word, lest it be supposed that in the earnestness and interest expressed now in reference to the finger alphabet, the fact may be overlooked that, in the constantly increasing numbers of the pupils of our institutions who learn to speak and read from the lips, the minds of some persons may form the idea that the manual alphabet is going to be of less and less importance to the deaf as time goes on; that, as a greater number of pupils learn to speak and read the lips, there will be less and less need of the manual alphabet to enable them to sustain the relations which they desire to sustain with those who hear and speak. I would like to assure any persons whose thoughts may be drifting in that direction, that it would be an error to suppose that even if the whole body of our pupils could be taught to speak passably well, and to read from the lips, that the manual alphabet would then have no place with them, and be of no service to them. Quite the contrary, Mr. President. It would be of very great service to them. And in my judgment every deaf child should have a ready knowledge and use of the manual alphabet; for circumstances arise not infrequently when its use, even to deaf persons who can speak and read from the lips, would be found of very great advantage. And in support of this assertion I will cite a case which came recently under my observation in Washington.

A lady whose home, I think, is in Wisconsin, who had never been a pupil in an institution for the deaf, but had lost her hearing towards mature life, and had lost it entirely, who had learned to read from the lips remarkably well, and who had always had speech, called with a friend at my house, and I entered into conversation with her. I said something which she did not quite understand, and she replied: "Won't you please spell it on your fingers?" I did so, and expressed surprise that she knew the manual alphabet. She said: "I am not one of those foolish people who have any prejudice against any good thing. I can read from the lips, it is true, generally very well. I can make myself easily understood with my speech; but I find often that I am a little at a loss, and then if I can have the help of the manual alphabet from those I am conversing with, I consider it a godsend." So she says: "I supplement my communication with others by the speech and by letter writing with the prompt and instant use of the manual alphabet, which helps me out of many difficulties."

And I can say further that there come within the circle of my

acquaintance not a few deaf persons who reject the manual alphabet on principle, they being speakers and speech readers. I know, by absolute observation and experience in my connection with such persons, that not infrequently there occur times and occasions when a resort to the use of the manual alphabet to make clear an obscure word, to help out an imperfect sentence, would be a great blessing and comfort, not only to the person who speaks the words from the lips, but to those who are communicating to such persons.

Therefore, I would draw attention to this fact, that while we, all of us, are encouraging, to the best of our ability and to the extent of the means at our disposal, the teaching of speech and speech reading to such of the deaf as can possibly be benefited, in doing so we must not think of coming to the time when we can dispense with the manual alphabet. In my opinion that will ever stand, so long as the affliction of deafness befalls humanity; will ever stand as an adjunct and means of communication worthy to be cherished, cultivated, and carried through to the very end of time.

DR. PEET: I will offer a resolution in connection with this paper, in order that we may make it practicable. I move that the Executive Committee of the convention be requested to publish this paper in the "Annals," and that they memorialize the Department of Public Education at Washington on the subject; and that the Principal of each institution in the United States be appointed a committee to memorialize the Department of Public Instruction in that State, to the effect that the recommendation of this paper shall be carried out in the public schools.

The motion being put was carried unanimously.

MR. C. W. GAMAGE, of New York: I have seen a great many people that use the double-handed alphabet, and but few who use the single. Why? It appears that the double-handed alphabet is more easily understood and acquired.

MR. D'ESTRELLA, of California: I was five years at the Art School in San Francisco. There were a good many ladies in school who could talk with two hands. I could talk in this way, but I did not like it. It would bother my work when I had some material, as charcoal, in one of my hands. Now, I tried to root out the double-handed by making some of them talk with one hand. I explained why it would be convenient, and in doing so, I showed in comical natural signs the disadvantages of the use of spelling double-handed. They, one after another, learned with growing interest how to talk single-handed. In the course of time some of them could talk not only to me, but also with each other. The Director expressed himself well pleased, for two reasons. The first reason was that it seemed to him that there was more frankness, freedom, and openness in silent talking than in oral whispering. The second was that as artist he could see and appreciate more life in the expression of emotions while they were talking than when they chattered and babbled.

There was another feature to the advantage of talking single-handed. When they would talk to me, I could look at their faces and notice some of them articulate as they were trying to spell the words on their fingers. This habit subsequently enabled me to read certain short and easy syllables on their lips.

MR. GEORGE, of Illinois: I have found in my experience that people can learn the alphabet readily but they cannot read the spelling of other people so easily. People can spell to me and I can speak

back. And I like that method of communication better than writing. I find that the double-handed alphabet is more common than the single. Many friends of mine who can spell with and read the double-handed cannot read the single-handed.

MR. JENKINS, of New Jersey: I am informed by one of the gentleman here representing the press that he learned the double-handed alphabet from the primer which he studied when at school. So the action recommended by the gentleman who read the last paper has been anticipated in this State.

MR. S. T. WALKER, of Kansas: I have never seen a deaf mute who did not understand both the single and double-handed alphabet. I should not discourage the use of the double-handed alphabet if our speaking friends preferred that. Our deaf mutes could surely talk with them if they could use the double-handed alphabet.

MR. BOOTH: I suggest that in order that we may secure a general and common form of communication among hearing people and their deaf mute friends that we consider which of the two should be abandoned and by which class. Inasmuch as the people who use the double-handed alphabet are largely in the majority, would it not be well for us who are in the minority to give up the single-handed alphabet and take up the double-handed? It would be an easy matter for us to do so.

MR. ELY, of Maryland: The difference between the signs in the double-handed alphabet as used is greater than between the signs of the single alphabet; and so as a natural result hearing persons are able to read the double easier than the single. And in conformity with general usage, would it not be a good idea for us to give up the single and take up the double-handed alphabet? Why not use both of our hands?

REV. GALLAUDET: I think we ought to put the double-handed out of existence, as the single-handed is so much more convenient, enabling us to talk with one hand while using the other for any purpose.

MR. WILKINSON then read the following letter from Homer B. Sprague, of Mills' Seminary, California:

MILLS' SEMINARY, ALAMEDA COUNTY, CALIFORNIA, July 17, 1886.

President WILKINSON:

DEAR SIR: In behalf of Mrs. Mills and of all the officers and teachers of this institution, I hereby extend to you, and through you, to the National Convention of Deaf Mutes now in session at Berkeley, a hearty invitation to visit Mills' Seminary at such time as may be agreeable to you and to them. With great respect,

Truly yours,

HOMER B. SPRAGUE, President.

Here the convention adjourned until three o'clock P. M. Sunday next.

FRIDAY, JULY 16, 1886.

NIGHT SESSION—NORMAL SCHOOL SECTION.

MR. S. T. WALKER, Chairman pro tem., called the meeting to order.

MR. WEED: The topics to be considered in this primary department are "Vocabulary," "Tense," "The Correction of Mistakes,"

"The Methods of Review," and then the exercises that have been found most profitable for primary teaching. This morning we exhausted only one of these topics, which is the first, "Vocabulary."

The next in order is "Tense;" I do not specify what tense. The exercises of this department will now be taken charge of by Miss I. A. Shrom, of Wilkesburg, Pennsylvania.

MISS SHROM: I have a paper here prepared by Miss Mary E. Henderson (?), of the Illinois institution, bearing directly upon this matter of tense, which I will read:

"I teach the past tense first, with the exception of the verbs 'is' or 'are,' 'have' or 'has,' and 'love.' If one of my class is sick, I want at that time to teach the class to write, 'John is sick,' and not wait till he gets well, and then teach them to write 'John was sick.' It is not necessary to wait, however, until a member of the class becomes sick before teaching the verb 'is.' I have no particular time at which to teach the word. This term 'is' was first used in the Sabbath school—'God is good.' It was afterwards used similarly in reference to persons whom the pupils knew, as 'Dr. Gillett is good,' etc. Afterwards used in picture lessons, as 'I see a cat. The cat is on the floor. The cat is pretty,' etc. I would not teach the class to write 'Yesterday was Sunday' before they had learned to write 'To-day is Monday.' I teach 'have' and 'has' at a time when a child brings something new into the school-room, an orange, for instance, or an apple. With small *speaking* children the verb 'love' is almost invariably used in the present tense. For that reason I teach it to the deaf and dumb in the present tense. It is much easier to teach the child to write 'I love Dr. Gillett,' 'I love my mother,' etc., than 'The girl loved her cat.'"

MR. ELY: I desire to ask Mr. Weed what tense he uses at the outset, and for how long.

MR. WEED: For the first two years I teach the past tense almost exclusively. In fact, I think it was in the third year that we introduced the present tense, both in its habitual and in its actual form. I am satisfied that there is more experience on this subject in the room than has yet been made manifest. If there are those here who have practiced both, confining themselves to the past tense in the first year, or giving the past, present, and future in the first year, we will be very glad to have the benefit of their experience.

MISS PHEBE WRIGHT, of Michigan: In the first year I do not see how we can ask questions of the pupils without using the present tense. My pupils have been taught to ask questions in the first year; and I cannot see how they can be taught to ask questions in the past tense.

MR. WEED: Let me illustrate the manner in which it was conducted in the class to which I referred this morning. Take the word "see;" and supposing that only the past tense has been taught. I would say "John saw what?" That may be called an unnatural way of putting the question. You would prefer to say "What did John see?" Is that the point?

MISS WRIGHT: That is not the exact point. In the first place I would have John stand up and see something, and then he would spell, "I saw a bird." Then I would turn around and ask the question.

MR. WEED: I would ask, "John saw what?" The attention of the child is fixed upon the object and he simply answers, "A bird," and

he has now a complete and a correct sentence. If you raise the question whether there is any trouble in the transfer from that form to the other, I should answer none whatever. For the first two years the questions are asked in that form. All that the child is asked to do at the beginning is to substitute a bird for the "what." The teacher has given the whole sentence except that one word. The answer contains the substitute, and the sentence is completed. By adopting that form of question you can confine yourself to the past tense for the first two years. When the pupil comes to write his compositions, as the most of his stories are in the past tense, that is the form in which he will write them. If there were time I should be glad to present this evening compositions written at the end of four and of six months, in which there is scarcely a mistake, which is partly owing, I think, to this form of using the verb.

MR. GRADY, of California: What distinction do you make between regular and irregular verbs? For instance, what is the change from "saw" to "see?"

MR. WEED: We have only one past form. It is only the simple past tense—the one form of the verb "saw." For the first year I would simply teach "saw," and not the present tense at all, so that the idea of the pupil is associated with only three letters, "s-a-w."

MISS WRIGHT: I do not see that my question is answered yet: What are you going to do with the child that asks the question? You certainly cannot have them ask the question in the past tense, and you do not teach the present tense; and what are you going to do?

MR. WEED: I believe I qualified the statement in regard to the perfectly uniform use of the past tense, and would allow the exceptions that are made in the paper read—the verb "to be," and perhaps "have" and "has," though my practice has been not to allow the use of them very much, because the advantage of clinging to the past tense seemed on the whole to be greater than the disadvantage of excluding the verb "to be" for the first year; that is, letting such ideas be expressed by signs rather than by language, so that the verb shall, without modification of its form, express but a single idea.

MISS SHROM: I ask Miss Wright to please give an example or two of the form of question she has in mind at present. A great many questions, I think, can be stated by using the past tense already referred to.

MISS WRIGHT: Anything that is wanted in the school-room I have always required them to ask for, or if they may have it, whatever it is. As soon as they understand anything of language they are taught to ask questions, or to ask for anything that they wish; and, of course, it must be done in the present tense.

MISS SHROM: In that form the very verbs that are made exceptions here are brought into use.

MISS WRIGHT: I will take any verb that comes into use. I would not limit myself to any tense, but would use the present or the past.

MR. NOYES, of Minnesota: What would you do with a large class of exercises, which I think are very important, that of the whole class writing, while one is doing something? That is the way ordinary children learn language. When the sugar is passed at the table, the little child learns to say, "Mother, pass the sugar." We set the children to doing something, one of them, or the teacher, and the rest of them looking on and writing it. That is in the present tense.

MISS WRIGHT: I should certainly ask the children to give the ques-

tion themselves: "Please pass me the sugar;" and then the rest would write the same.

MR. NOYES: I think, if you are going to use exclusively the past tense at that very early period, that the child must become cramped, and his style stiff and unnatural. I think there is a tendency, at the present time, to learn language by the natural method, and not in the past tense; to have the child understand that while the thing is going on it should be expressed in the present tense. If there is any special reason, I would like to know it, why the natural method should be ignored in the case of deaf children any more than in the case of ordinary speaking and hearing children; why they cannot ask the question of you in the present tense, and not for the first, second, and third years in the past tense; and then, furthermore, why children may not be encouraged to read, as many of them do, in the papers, and in the little books, to catch up sentences in the present tense, and not be obliged to put them in the past tense. Why shall we leave the natural method, and confine ourselves to this particular form for the first and second years?

MR. WALKER: I call upon Mr. Job Williams, of Connecticut, to answer Mr. Noyes' question.

MR. JOB WILLIAMS: I do not know as I can answer it very briefly; but I should like to take a few minutes to answer it. In the first place, I would say this: that we may as well make up our minds at the beginning, that it is utterly impossible to teach the whole English language at one time. The great difficulty with teachers—especially with young teachers—is, that they are not willing to go slow enough. We do not realize sufficiently how very great the obstacles are, that are in the way of a deaf child learning language. We must start at the very foundation. The question is, how in the long run we can accomplish the best results; not what apparent results we can get into a week, six weeks, six months, or a year, but what is going to produce the best and most permanent results, to be the most solid foundation on which a child can build.

It is a good principle, and one to which we ought to stick closely, that we shall introduce difficulties one at a time. On that ground, the first year I would introduce but a single tense. You may say that is not natural. It is not as ordinary children talk. But the tense, whether it is present or past, used alone, is no tense at all to the child that is learning it. The incongruity is in your mind, and in my mind, because it does not conform to language as you and I use it. But it is a root idea in the child's mind, just as much as the sign, and that is all there is of it, until you begin to teach the child to distinguish between the present, past, and future. And so I say that I would begin with a single tense, the present tense, and would not teach the past tense, and for most important reasons. In the first place, the present tense contains the root form of the verb, and that is the form which you wish to stand by the child. Then, in the next place, the root form of the verb is used in more combinations than any other form. Take for instance, the verb "go," and we have, "can go," "must go," "will go," "shall go," etc.; and in questions, "May I go?" "Can I go?" "Do I go?" "Shall I go?" "Must I go?" etc. If the child is ever going to learn the use of the dictionary, when he goes to look for any word, it is the root form of the verb he must look for.

I will grant that a teacher may take the past tense, and may per-

haps succeed in the long run just as well. But I think it is better to fix in the mind of the child in the first place the root form of the verb, and do not take any other, because there are so many other difficulties the child must contend with. He has to learn nouns and the difference between the singular and the plural forms, pronouns with their different forms of case and number, adjectives and their office, adverbs and adverbial phrases—a great many things, for a mind entirely untrained, to remember. In addition to these, one form of the verb is better than more for a long time—the greater part of a year. So I would begin with nouns in the singular number. Next I would introduce the intransitive verb and get the shortest possible form of a complete sentence. On that I would build one step at a time, introducing in their order the transitive verb with its object, adjectives, plural forms, the possessive case, pronouns, adverbs, adverbial phrases of *place*, etc., but always demanding a complete sentence.

Adverbial phrases should always be taught as units: “A boy puts his hat *under the table*.” “A boy puts his hat *on the floor*.” In that way the child may be taught to write correctly as far as he can write at all; but it is all of the time a limited and cramped language. I know it; everybody else knows it; and it seems unnatural. But wait. You have a sure foundation upon which you can build. In the second year you can introduce adverbs of time; those come in with the past tense and the future tense. The child very quickly brings the three tenses which he has learned under perfect control to distinguish accurately the difference in time, and then he uses the adverbial phrases of time. The sentence is built up step by step; the child knows all of the time just where he is, and what he has done; and though he may not see all that you see in the gradual process, yet he has absorbed by this constant practice in this careful, methodical way, these forms of language, and they are his, and he will not forget them.

I know that years ago, when we used a great deal more miscellaneous way of teaching, the exercises of our pupils were full of “deaf muteisms.” We do not have one now where we had ten then. And I am perfectly convinced that by this careful, systematic building up of sentences, so that the child knows exactly what he can do and what he cannot do—and if an essential part of a sentence is left out he knows it just as quickly as you and I do—we shall secure a better foundation, and better permanent results than we can by any natural method, as you may call it, that can be found.

I know that by the natural method you will find a few pupils here and there will pick up words and phrases, and will seem to make astonishing progress in language. But they are not as secure of their results; and there will be only two, three, or four in a class that will make that progress. But if you have this careful, systematic way of building, you can take almost the whole class along with you, so that they will all have a secure hold on those forms of language. We must be willing to wait and build slowly and carefully. The more complicated forms will come in due time, and they will come surely.

MR. NOYES: I would not be understood as implying that I would, if I may use this illustration, take all kinds of fruit out of the basket and pour them into the child's mind, irrespective of any order; but I would encourage a child, if he was going into the forest, and was interested in looking at the trees, to learn their names. I would not

say to him, "There is an oak tree; and you must not know anything about any other tree than the oak there;" or, "There is a maple tree, and you must not have anything to do with that;" or a birch or an elm or a willow; but I would let him learn the names of as many trees as he was interested in. And if I felt that he was learning the names of all the trees in the forest I would try to have him classify them by their bark, and shape, and so forth, and by and by he would learn that one was an elm, the other an oak, the other a hickory, and so forth. To say that he must learn but just one kind of tree because he has not got far enough, is a stiff and unnatural method. You may say here is a child with a body to be built up; and he must eat nothing but meat and potatoes all of the time. That is not natural. He wants a variety of food to build up muscle, blood, sinew, and brain. And so with mind.

I think one difficulty in some of our schools is this: we begin, if I may speak, at the big end of the tree, and we try to teach the science of language, instead of waiting until the child has language enough so that we can show him where the science comes in. You cannot generalize until you have something to generalize. You want to know something about the names of different things, and to have enough material to work upon. I notice that our little children, and we have a good many Swedes, Danes, Norwegians, and Scandinavians in our State, mingle in the streets with other children, and pick up the English language remarkably quick. The parents will be four, six, or eight years learning the language, and then cannot speak as well as the children can in a year or a year and a half. How do they get it? They do get it, and they use it grammatically, too. They do not learn the present tense, and then by and by the past tense, and then by and by the pluperfect tense; but they pick it up from time to time and see it in its connection. And when they have this language, and they are put into school, they begin to distinguish between the past and present tense. And a child that has learned out of books, or in school exercises, will take great pleasure in picking out of a sentence, or out of a book, those verbs that are in the present, and those that are in the future tense. We want to give them something that comes naturally and easily, before we begin to philosophize and teach them grammatically.

I wish to be understood that I do not believe in trying to make a child classify all of the trees in the forest at once; but if a child is interested in a tree, let him know its name, and by and by when you can generalize, then do so. Let the children in our schools learn somewhat after the natural method of ordinary children in the acquisition of language. You will find that Indian children have just as peculiar idioms as our deaf children have. Some of you may have seen within the last three or four months a letter that appeared in the "Youth's Companion," written by an Indian boy sixteen years of age, a pupil in an Indian school. He was considered a boy of remarkable progress; and yet, right in that letter, you will find just as peculiar "isms" by that Indian boy who was never taught by signs at all, as you can find in the ordinary conversation of our deaf and dumb children in the first stages of their progress.

If you send your child out to learn the French language in the quickest, the surest, and the best manner, you put him into a French family. And you would not say, "Now, you will speak in French in the present tense for the first six months, and then in the past tense."

The minds of deaf children are very much like the minds of ordinary speaking children. We cannot expect to advance deaf children much faster than average hearing children. If it is a good thing for speaking and hearing children to learn Latin, French, Greek, or English in that way, why is it not good for the deaf and dumb? Their minds are very much the same; and we have observed in many cases that when they have had this opportunity, that they come out in as good a condition, so far as I am able to discover, as the others. I have worked under the stiff, cast-iron method, and have seen its results; and I have sometimes felt like asking the humble pardon of some in the profession to-day, who were my pupils, because I ground them through that method, the fault of which I know they now realize as much as I do.

I want deaf mutes to be free and easy, and learn things as their brothers and sisters do who can hear and speak. I think the rule which will apply to hearing children is not entirely deficient in its application to the deaf and dumb.

MR. WILLIAMS: In regard to this question of learning language by hearing children, and why deaf mutes may not learn the same way, it seems to me that the whole difference lies just in the fact of their difference of condition, and the consequent impossibility of having the same amount of practice. If, by any process under the sun, you could give the deaf mute child the same amount of practice that you can give the hearing child, there is no reason why that child should not learn language in just the same way, and just as correctly.

MR. NOYES: So far as it goes, why is not the practice of the deaf and dumb just as good as the practice of the hearing child?

MR. WILLIAMS: It is not, because if our hearing children could get no more practice than the deaf and dumb children get, they would not get language in that helter-skelter way. But we need to give them help, to cut off difficulties, and to make language as simple as possible. If you begin by teaching them by the natural method, you have a great variety of forms of construction right off. The child is perfectly bewildered, and very soon his language is all mixed up, and nothing is clear in his own mind or to anybody else. You may say that the other way is a stilted way. So it is; granted. The pupil's language will not be just like the language of a hearing child for a good while. But just so far as he goes, his language will be correct. He knows it is right, and others know it is right; and he can learn very quickly to express his ideas in accurate language. Now give him time to grow. Why do not mothers take young children and begin to feed them right off on meat and potatoes, sour apples, cranberries, and everything else? It won't do. It is not good for the children. But if you give a child a simple diet for awhile, and allow it to gain strength step by step until its physical powers get a little stronger, you may by degrees increase the variety and the child will thrive under it. I believe it is a good deal so with language. You cannot teach the whole of the English language at once. You may try but you cannot do it. [Applause.]

MR. CROUTER, of Philadelphia: Our pupils in the institution at Philadelphia have no form or style except as they are taught by the teachers. If they are taught the present tense, they will use the present tense. If they are taught the past tense, they will use that form.

I agree very much with Professor Williams as to the best method of teaching language to primary classes, except as to the tense. It is

our custom in Philadelphia to teach the past tense first; and we do it for this reason: In the past tense the form of the verb does not change. Take the verb "struck," for instance: "The boy struck the table," or "A man struck a dog;" the form is always the same. If you use the present form you say "strikes," or "is striking;" introducing difficulties with the present tense which you escape if you use the past.

MR. WILLIAMS: You do not need to introduce two forms of the present tense.

MR. CROUTER: I think of the two forms of the present tense I should prefer the other. You would say, "The horse eats grass;" the child would say, "The horse is eating grass." If I understand you, you would teach the child to say, "The horse eats grass."

MR. WILLIAMS: Yes, sir; it is merely a root idea in the child's mind, and nothing more.

MR. CROUTER: You spoke of the use of the dictionary. If the child was to turn to a dictionary for a root form, it would get "to eat;" it would not get "eats." You might as well give it "ate" as "eats," so far as the dictionary is concerned. And we prefer the past tense for that simple reason. And for another reason, that in our work we cling very much to action writing. The act is performed and finished in the presence of the child. It is not an habitual act. The act is finished and we give the correct form of the word at once.

MR. WILLIAMS: You ascribe to the child a difficulty which is in your mind, but which has no existence in his. To him the verb has only a root idea until he is taught to distinguish the different forms to express time.

MR. CROUTER: If that is all, we might as well give the past as the present tense.

MR. WILLIAMS: That is true; so far as that one point is concerned one would do just as well as the other, but there remains many reasons in favor of the use of the present tense.

MR. CROUTER: I agree, too, with Miss Wright as to the desirability of introducing very early the present form in asking questions. I think that is very desirable. I would, however, limit it, and would not attempt to teach a child all forms of questions. I would not think of introducing the future, the present, and the past tense all at the same time. I would use one first; and I would ground the child thoroughly in that one form. We use the past, and Professor Williams uses the present; that is the only difference. Then we teach the verbs, so far as asking questions is concerned: "to be," "to have," "to like," and "to love," and that is about all.

MR. NOYES: In your articulation work do you always confine yourself to those tenses, or do you teach just as ordinary children are taught in the public school?

MR. CROUTER: In our school, in Pennsylvania, we have two oral classes, so far as school-room work is concerned, and the same forms are observed as in the teaching of the pupils in the sign classes, although they are taught orally. The forms are almost identical, and the results are very gratifying.

I agree with Mr. Williams that it is very important to lay a firm foundation, and to let that be very simple. You cannot make it too simple. [Hear, hear.] The difficulty is that teachers give their pupils too many forms. They want to get over too much work, and the result is that the pupils, in trying to use those forms, in none of

which have they ever been sufficiently grounded, blunder, and we have the troubles and the terrible mistakes in the end.

MR. McFARLAND: In this battle of giants upon this high and mighty plane I have not any theories. But I want to ask a question that continually troubles me. I wonder whether, in teaching language to deaf mutes, we are trying to make them acquainted with all the details of a vast and complicated system or mechanism of words, and the relation of all its varying parts as a science, or whether we are trying to fit these particular children to say, "I want some water," or to understand, "Bring me some wood," or "Where is John?" And I wonder why it is that so many children in the schools taught by this method or by that method, whether the past or the present tense may be used, get so dreadfully sick of their language lessons? Their slates are all chalked up every day, and they do not see why, and the teachers are never satisfied. They fix it over and over again, until the language becomes the terror of their lives, almost. It is simply because they are grinding with the bricks, and not putting up the building. A workman sitting down and squaring off each brick takes off so much of this corner and so much of that, because by and by it is going to appear up there on the corner. But he does not care very much about that brick. And I wonder why I find pupils from all of these schools, who have been three, four, or five years under instruction, by one or the other of these systems, who will sit down and write a note-sheet page about anything, and who, if they have been taught in the present tense, will perpetually write in the present tense. You may call their attention to the word, and they will change it and understand it; but that habit they have absorbed, and have become so saturated with the first forms that they got, that they will stay there forever, and you cannot rinse or wash them out. I wonder why these things are? I cannot see behind all these things, and I have no theories about it; but these things are perpetually coming up to me, and I wonder what the objection is to my taking a deaf mute child into my school, and beginning by writing on the board or spelling to him, to get him acquainted with the letters so that he knows writing and spelling; and telling him to bring me the slate, and then giving him by signs or in any possible way what I mean, and point out the signification of each word. It means something to him. He is doing something which he is interested in. He knows that he is to bring that slate; and that language represents to him precisely the thing which you want him to do. He understands that language, and he will stick to it. "Bring me something" always means after that, "bring me something." What is the objection to my doing that? Why must I set up before them a more complicated system of things, starting them in at one corner and say to them, this is the block you are to hew upon for the present? Why can I not teach them in the same way that I teach other children?

MR. CROUTER: You can do it.

THE CHAIRMAN: The time has now arrived for a change of subject. The next subject will be arithmetic.

MR. BOOTH: The work before the section will now be the development of the problem as it is before us in the class-room with a class of deaf mutes. Indeed, our entire work in arithmetic is the development upon the mind of the pupil, of the problem, and the teaching of its solution. And I may say, that though we spent considerable time upon notation and numeration this morning, I would not have

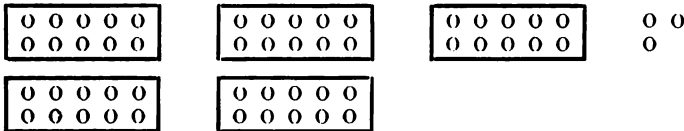
the impression prevail that all of notation and numeration is to be taught before the processes of addition and subtraction are begun. Notation and numeration should be a growth, brought out and developed by necessity; necessity existing in the solution of problems that are presented to the class, or to the child.

Addition and subtraction should be taught together, the one process as the complement of the other. The first problem presented—and all processes must be taught in problems—may be one in subtraction. It is a very easy matter for the teacher to make a mistake in teaching the simpler processes with numbers, resulting in a total misconception on the part of the child of the nature of such processes. It will not do to subtract two things from five things and leave three things, the child looking on and seeing in succession, the five things, the two things, and the three things as they may be pointed out to him. No problem has been presented to him, and he has solved none. Figures may be shown and taught as representing all that has been done and seen; if so, so much the greater is the mistake. The proper presentation of the problem will show clearly and positively the existence of the unknown quantity, as also the purpose of the problem to determine it. To this end, some art must be exercised by the teacher.

Presenting the problem, two from five, how many left? the teacher will show the five things and cover them; he will then expose two of the things and take them away. The desire will at once become general to know how many are left under the cover. The art of computation will be brought into exercise, and the unknown, or unseen, quantity will be determined. This is subtraction. It cannot be explained; it can only be seen, and being seen, it may be understood. It is a game, and it will be entered into with all the interest and zest of which the child nature is capable.

Addition is taught in the same way. The known quantities will be seen, leaving the unknown quantities unseen and to be determined. All the combinations with smaller numbers should be taught thus in problems, and as mental exercises. Figures should not be used by the pupil, unless to indicate the "answers," until the processes become so complex that the mind fails to retain and follow them. Figures, and operations with figures, may then be taught with little danger of misconception of their meaning and their purpose.

Using the decimal system of grouping or bunching quantities, it is a comparatively easy task teaching "carrying" in addition and "borrowing" in subtraction. It will be sufficient, perhaps, to illustrate the latter. If it be required to subtract twenty-five from fifty-three, the quantity fifty-three will be shown as five tens and three ones:



Then it will be covered. As a quantity, it is known to every member of the class. Memory of the form, and knowledge of the character of the number, make the cover practically transparent. The quantity is approached with the purpose, clearly understood by all the class, of taking from it the quantity twenty-five. It may not all be taken at once; five will be taken first. Trouble is foreseen; there

are but three of the kind wanted. They are uncovered, and the impossibility of taking five from three is at once apparent. There is but one course open; it is to break up a ten. This is done. Five ones are exposed, and taken away. At this point the attention of the class is directed to the figure 5, and it is suggested that the quantity five (tens) no longer exist, that it has become four. This is perfectly clear, and all see it as necessarily true. The next step is to uncover two tens, and take them from the four tens that are known to still remain behind the cover. The conditions of the problem have been carried out, and it remains to determine the unknown—the so far unseen—quantity. No aid should be given further than this, and no suggestions should be offered. With a clear idea of the end in view, and a strong desire to attain it, the pupils may be left to the figures and their own devices to discover the way to such attainment. If they are ready for the problem, they will have no difficulty in solving it.

Carrying in addition may be shown as merely a process of bunching tens. No number higher than nine can be represented by our system of notation. Whatever may be the denomination of the units, as soon as they become ten they are changed to one of the next denomination larger.

After much practice in the processes of addition and subtraction, the combinations in figures may be taught in tables, though in most cases it will not be found necessary.

It is important that the problem be developed systematically. The problem exists in nature independent of text-book, and independent of figures used in the operation for its solution. If I have had any success in teaching arithmetic I attribute it to this, that I have required my pupils to illustrate the conditions of problems so far as it has been possible to illustrate them; and in that way figures are not only significant, but the operation with figures becomes significant of the process with numbers or with quantities.

I will speak of a few of the difficulties that are met with in teaching subtraction, in using figures alone, and I think your experience will confirm mine in what I may show you.

How often have we seen our pupils with such a problem as this:

$$\begin{array}{r} 102 \\ 202 \\ \hline \end{array}$$

Given them for subtraction, actually perform it, and have for a result 900?

It has been my experience, as, I think, it has been yours, in trying to get pupils to illustrate problems, that their working of them will show that they have an entire misconception of the process that the operation is intended to represent. And in order to show that, as it really occurs in our school-rooms, I will ask Mr. Spruit to act as a pupil for a few moments, and do just what our pupils often do when asked to show their understanding of the problems that they work. I will give to him, he being one of a class of fifteen or sixteen pupils, all acquainted with addition and subtraction, and able to add and subtract figures, the following problem: "Walter S. has nine blocks; if he gives away six blocks, how many will he have left?" I give my class that problem, and among them, Mr. Spruit, and he will work it on the board in the usual way.

Mr. Spruit wrote the problem upon the board as follows:

$$\begin{array}{r} 9 \\ 6 \\ \hline 3 \end{array}$$

We have no means of telling by that that he does not understand that as a process, and we are inclined to think that he does, and he may write a sentence: "I have three blocks left." Now, I, as the teacher, am a little skeptical, and inclined to doubt whether my pupils understand all of these operations that they perform so readily, and I ask the pupil to explain it with the blocks.

Mr. Spruit being furnished with the blocks, first counted out nine to represent the nine that Walter S. had; then counted out six more other blocks to represent the six given away; and counted out three more other blocks to represent the blocks remaining; refusing to take the six blocks out of the first nine.

This shows the meaninglessness of this operation as understood by the pupil. That is, it does not mean anything that is possible in nature.

MR. JOB WILLIAMS: What portion of the class would you expect to be as brilliant as that?

MR. BOOTH: If they had not been taught in the way I did teach, I think that the greater part of the class would be just about as brilliant as that.

MR. WILLIAMS: My experience does not agree with yours in that line.

MR. BOOTH: If the pupil is taught figures he will do something of that kind if he is required to illustrate. The pupil cannot be expected himself to see that six is one part of nine and that three is the other part. If figures could be made to somehow show that a part of nine was six and the other part was three, then to take away the six and leave the three, that would exactly represent the process that he really goes through.

This is the way that I should teach that. I will call upon Mr. Spruit again and begin at the other end. I would show him the nine blocks, the known quantity, because it has been seen; also another known quantity will be presented; and he is told to put both of them upon the slate, and he does so. The problem is presented; the conditions have been stated and acted out; and now comes the problem, the determining of the unknown quantity, which I will leave it to him to determine. He does determine it, and he is certain of the correctness of the result. Now, I submit that he knows just what every one of those figures represent; that they represent the quantities; and he understands at the same time the relations that these quantities bear to one another; and understands the process that has been gone through with, which is a process in subtraction. [Applause.]

Going back to addition, and beginning even with "2 and 2 make 4," I will ask the pupils to write what they see; that is, to put down figures to represent known or seen quantities. They see $\frac{2}{2}$; and I ask how many there are, and they reply 2. And I say, "Well, put it down on your slates somewhere, I don't care where or how." They put it down. Then they say, "How many?" "2 more?" "Well," I say, "put them down." And they put down $\frac{2}{2}$; and they all see that 2 and 2 make 4. I show by my face that I want one expression

for the whole quantity; and they write 4, and they say 4; and that is the problem solved.

In teaching the addition table, I would not set the tables for them to memorize. I would teach the tables, but I should require them to make them; and should require them to determine the complementary quantity and character in this case; and so through. I should require them to make all of the details in addition, subtraction, and multiplication. I should require them to discover them, and if they lost or forgot them, to rediscover them. Then they know the process of addition, of subtraction, of multiplication, and of division.

I have not yet spoken of carrying in addition, and it would seem almost unnecessary to do so, having shown borrowing in subtraction; because carrying in addition is simply the reverse of that. But it is easily shown with splints. I, in my class, have a great deal of writing of problems. I perform an acting problem before them, and they, seeing me, write the conditions as they see them.

A MEMBER: Do you require any written solution of the problem?

MR. BOOTH: No, sir; I do not. I require them to illustrate a problem by simply writing it upon the slates, such as six blocks from nine blocks leaves three blocks.

MR. CONNOR: How long do you carry on this illustration, to the point that you go directly to figures?

MR. BOOTH: If I am satisfied that my class understand thoroughly the processes with numbers, from that time I allow them to use figures to represent that process. I do not require them to illustrate after I am satisfied upon that point.

A MEMBER: How long has your experience proven to you that you would have to continue teaching in this way before you could drop illustration and take up figures?

MR. BOOTH: My present class I took at the end of three years, and have had it three years. It was three years old when I took it. I have had to use these splints but a very few times; about two months, perhaps. But I require them in all their problems in multiplication, and in division especially, to illustrate them by splints and by marks; principally by marks upon the large slates. This method of illustrating is the development of the last three or four years in my experience in teaching, and three of those years have been with this class, which is a comparatively advanced class. I have used the method with younger classes, but to a very limited extent.

MR. W. R. ARGO, of Kentucky: I cannot agree with the gentleman as to the solution of the problem. In our school we would consider that a boy could not work an example at all if he could not explain every part of it. And if a boy comes with the figures upon his slate, and the correct answer, but no written explanation, we send him back just as if he had not worked the example at all, and we give him a zero for it. We consider that if a boy cannot explain what he has done, and cannot explain it in good English, that he does not understand it. I have been very glad to hear Mr. Booth upon notation and numeration, and have fully agreed with him in everything so far; but in this I cannot agree with him at all.

MR. BOOTH: My experience in that respect and in that connection is this: That if I attempted to teach the forms that are usually taught, and that must be taught, that they learn those forms in a mechanical way, and learn to use them in the same way.

MR. ARGO: In a case of interest or insurance, some very compli-

cated example, how could the pupil indicate all these operations with blocks, or splints, or any other sort of appliances?

MR. BOOTH: He cannot do it. When you have arrived at that point, the pupil has acquired the ability to use the figures. I have pupils in my class who have never been taught interest excepting as I have shown it to them in connection with my own business. If I have loaned \$100, and have a note for the same, I show it to my class, and tell them something about it, and they see the amount of interest that is earned; and I tell them that I get for one dollar ten cents per year, and explain it in that way; and they are able to work problems in interest—at least they have worked problems in interest without any special instruction in mechanical processes with figures—in computing years and months, but not days.

MR. F. D. CLARK, of Arkansas: It has been a long time since I have taught elementary arithmetic, but I have had a great deal of experience in beginning classes with fractions. I started out by putting upon the slate, for example, three quarters of a pie, and the boy would go through a form something like this: I would ask him what that meant; and he would tell me that the figure 4 showed how many parts it was divided into, and the figure 3 how many of those parts were taken. And I thought he understood that fraction pretty well. But after awhile I found that some stupid boys could not get that form even; and I drew a line, dividing it for them, and then asked them if they could come up there and show me three quarters of that line; and I very soon found out that many of the boys could not do it. They could go through with this analysis, and tell all about it in language; they could tell which was the denominator, and which was the numerator, but when they came to showing the thing itself, they could not do it. For my own part, I had rather have the explanation that Mr. Booth has given there than a page and a half of the best language a deaf mute ever wrote.

MR. ARGO: I had rather have both; and I would have both or nothing. [Applause.]

MR. BOOTH: We can judge of the method by its results better than in any other way. I will relate an instance in my class. Two weeks ago, just after examination, we had no lessons, and I went into the study in the evening to give them something to keep them busy, and I gave them two problems in arithmetic to be done upon paper. One of them did not have any paper or pencil, but performed the problem mentally. The problem was: "A man had two hundred peaches for which he paid \$2 50. He sold one half of them at the rate of two for five cents, and the rest of them at the rate of four for five cents. How much did he get, and how much did he gain?" In two or three minutes that girl had worked that problem mentally, and had given me the answers; and I had to take paper and pencil to work out the problem to see whether it was right or not. I found that it was right. I say that by this method of teaching arithmetic that I have so far presented, they learn it as mental arithmetic. Indeed, all arithmetic is mental arithmetic.

MR. WALKER: How many pupils arrived at the right solution with the paper and pencil?

MR. BOOTH: I did not count, but I think two thirds of the class of sixteen. I may say that the problem that I gave this forenoon was worked by a girl who had been in school four and a half years, and

had studied fractions only since the term examination—about two months.

MR. WALKER: Are you certain it was no guess work?

MR. BOOTH: I would like to have somebody guess out the two answers. I know that she understood it. I knew the girl, and that I did not need to ask her if she understood it. She could take that problem and illustrate it; and the problem is quite involved, and the girl is a deaf mute who has been in school six years.

MR. T. L. MOSES, of Tennessee: Do you mean that that young lady thought out two hundred peaches, and then separated them into groups of one hundred, and then separated those groups of one hundred into the groups that you named there, of two each, and then next the one hundred into groups of four each, and that all of them had to work out that problem?

MR. BOOTH: I do not pretend to say that I can follow the reasoning process that the girl used.

MR. MOSES: Do you think she pictured two hundred peaches in her mind?

MR. BOOTH: No, sir; I think she saw the relations just as we do, and performed the example mentally just as we do, having arrived at that ability through this method of instruction.

MR. MOSES: In your experience how many objects can a child's mind grasp and see and understand at a glance, or at one time?

MR. BOOTH: I have not made any study of that.

A MEMBER: Do you believe a child can go above ten?

MR. BOOTH: I have no doubt of it, presented in that way.

MR. MOSES: Fifteen?

MR. BOOTH: No, sir; but the child sees seventy, by this method, just the same as it sees seven, or seven hundred—seven of these great groups, in just this same relation to each other.

MR. D. L. ELMENDORF, of New York: To illustrate in regard to taking in those groupings at a single glance, it is a physiological fact that nobody, with one or two exceptions, has been able to take in more than seven irregular objects at a glance. But if things are arranged in order, they may be taken in to almost any extent, with some practice. Of irregular objects placed upon the blackboard I doubt if there is any one in the audience who can take in more than six at a glance.

MR. WILLIAMS: Is not that a matter of practice? Cannot the eye be cultivated?

MR. ELMENDORF: No, sir; unless you put them in some particular order. Take a counting frame; a person looking at it, and knowing that there are ten on a line, will take in one hundred or five hundred or a thousand, but I do not think you can take any more than six irregular objects.

MR. WILLIAMS: I should doubt that, and, as evidence to the contrary, I once knew a gentleman who was very anxious to cultivate observation in his little child, and, in order to do that, he was accustomed to take him in his arms and carry him past a shop window, without stopping at all, and making him mention everything he had seen. At first the child would see but a few things, but by constant practice he could see and name almost everything there was in a window that he passed by, at a casual glance.

MR. ELMENDORF: That is an entirely different thing. While he

might be able to tell the names, he could not tell how many there were there.

MR. WILLIAMS: No, sir; but he could name over a great many different things.

MR. ELMENDORF: But he did not take them in at a glance; his eye followed them.

MR. WILLIAMS: Then you think that to grasp accurately more than six things is impossible?

MR. ELMENDORF: That is what the different physiologists have stated.

MR. CROUTER: I think it would be better for us to have an evening session to-morrow night, and if we can come back then and hear Mr. Booth upon the subject of arithmetic, I think it would be for our interest to do so. I would like to say, in regard to Mr. Booth's method of instruction, that I know it to be very successful. He has pursued his method by the side of the usual method of teaching arithmetic, for the last two or three years, and I need not say with the very greatest success. [Applause.] It is simply teaching arithmetic through the sight, just as you teach language, and the pupils understand what they are about.

The motion was made, seconded, and carried unanimously, that there be an evening session to-morrow for the consideration of this subject, at half-past seven.

Here the department adjourned.

THE EXCURSION.

The excursion of the National Convention of Teachers of Deaf Mutes, in session at Berkeley, last Saturday, was a success in every particular, and the visitors were delighted with all they saw during the day. The members of the convention boarded a special train at Dwight Way at nine A. M., and were taken to the mole, where they embarked on the ferry steamer *El Capitan* and steamed out into the Bay towards San Francisco. Skirting the city front of that city, they had a splendid opportunity of viewing the ever varying aspect of the city from Market Street to Black Point, where they ran into the first misty veil of fog that was floating through the Golden Gate. Circling Alcatraz, the steamer ran under the long silent, half-dismantled parapets of Fort Point. Here the fog was so thick that it was deemed unadvisable to make a further excursion in the direction of the Pacific Ocean. The northern shore was then skirted from Saucelito to San Rafael, around Red Rock to Hunter's Point. It was now half-past one o'clock, and at the suggestion of Mr. Wilkinson, the steamer ran into the slip and the party went ashore, breaking up into parties and visiting Chinatown, the Chinese theater, Palace Hotel, Nob Hill, the jewelry stores, and other points of interest, making small purchases and otherwise enjoying their "run ashore." At the proper time all of the party were on board and the steamer returned to Oakland. A band of music accompanied the excursion, and dancing was indulged in. A substantial lunch was served during the day which was thoroughly appreciated by all who partook.

NORMAL SCHOOL DEPARTMENT, JULY 17, 1886.

EVENING SESSION.

MR. ELY, of Maryland, the Chairman, called the convention to order.

MR. BOOTH: We will take up, this evening, the subjects of multiplication and division, and, if we have time, fractions, and hurry through them rapidly. But I would like to say that what I talk in five minutes, it takes perhaps five months to teach; so that you will understand that we do not rush along so fast as I am compelled to here. Coming to multiplication, we teach it first as addition, as, of course, multiplication is.

Multiplication should be taught as addition—as repeated additions of the same number: three times four may be the first combination taught, and it would be well to teach but the one combination in one day, reviewing it the next day and on succeeding days. It will be presented first in the usual way:

$$\begin{array}{|c|c|c|c|} \hline 00 & 00 & 0 & 0 \\ \hline 00 & 00 & 0 & 0 \\ \hline \end{array}$$

and the addition will be represented by the operation with figures:

$$\begin{array}{r} 4 \\ 4 \\ 4 \\ \hline 12 \end{array}$$

The significance of each figure will be pointed out. It may then be shown that the operation,

$$\begin{array}{r} 4 \\ 3 \text{ times} \\ \hline 12 \end{array}$$

may represent the same process. This will have to be shown a great many times before the identity of the processes will be established and the significance of the figures understood. It will be well to require pupils to illustrate all problems in multiplication, and to work them by both the addition process and the multiplication process. The latter will in time be seen to be the shorter, and will be adopted. The multiplication tables should be learned by the pupils, but they should be required to determine the proper combinations themselves, and this by successive rediscoveries rather than by memorizing the results of first discoveries. The aim will be to teach the pupils to see in the figures of a combination the conditions of the process that determined it; otherwise they will learn the combination as a purely arbitrary aggregation of figures. In teaching multiplication of tens and multiplication by tens, it is important that the operations be illustrated. This may be best done by using marks in groups of tens. Twelve multiplied by twelve is illustrated:

$$\begin{array}{|c|c|} \hline 1111111111 & 11 \\ \hline 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ 1111111111 & 11 \\ \hline 1111111111 & 11 \\ 1111111111 & 11 \\ \hline \end{array}$$

All see at a glance that the product is one hundred and forty-four. The partial products, and their sum, will be shown in figures:

$$\begin{array}{r}
 12 \\
 12 \text{ times} \\
 \hline
 4 \\
 20 \\
 20 \\
 100 \\
 \hline
 144
 \end{array}$$

In time, this may be shortened to:

$$\begin{array}{r}
 12 \\
 12 \text{ times} \\
 \hline
 24 \\
 12 \\
 \hline
 144
 \end{array}$$

And it will even be shortened to the combination of the multiplication table:

$$12 \times 12 = 144$$

The pupil may learn to multiply mentally, thirteen by thirteen, thirteen by fourteen, fourteen by fourteen, fifteen by fourteen, and others of the simpler combinations, by seeing a mental picture of the hundreds and ten products, and combining them. This method of illustration may be used in the multiplication of larger numbers:

$ \begin{array}{r} 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ \hline 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \end{array} $	$ \begin{array}{r} 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ \hline 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \end{array} $	$ \begin{array}{r} 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \\ \hline 1111111111 \\ 1111111111 \\ 1111111111 \\ 1111111111 \end{array} $	$ \begin{array}{r} 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ 11111 \\ \hline 11111 \\ 11111 \\ 11111 \\ 11111 \end{array} $
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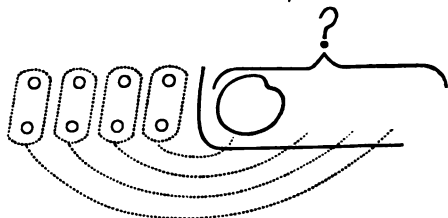
The product, as may be seen, is three hundred and fifty and ninety and fifteen; or, expressing it concisely, four hundred and fifty-five. Representing the process in figures, we have:

$$\begin{array}{r}
 35 \\
 13 \text{ times} \\
 \hline
 15 \\
 90 \\
 50 \\
 300 \\
 \hline
 455
 \end{array}$$

In this the significance of every figure is obvious. As the numbers grow larger, and the difficulties of illustration increase, the necessity for it will cease to exist. The significance of place will be well understood, and principles will have become well established, and the pupil will have acquired ability to reason and to generalize up to a mastery of the more complex processes. There are two kinds of division: one in which the divisor and dividend are numbers of the same denomination; the other in which the divisor indicates the number of parts to be made of the dividend. The former is subtraction (subtraction-times), and should be taught first. The latter is factoring, and should not be taught until the former is thoroughly mastered.

Care should be taken that the purpose of division is clearly understood. It should determine something that all want determined, and that all see may be determined. As in all processes, the unknown quantity will be the missing keystone to the arch; it will be seen in its relations to the known quantities; will be sought for intelligently; and when found will be recognized as the thing sought.

Problems presented should first be solved without the use of figures:



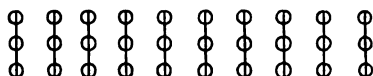
The problem thus presented would read: At two cents each how many peaches may be bought for eight cents?

The purpose of the problem being clearly understood, a mechanical operation with figures may be taught as representing the operation performed:

2)8(4 times.

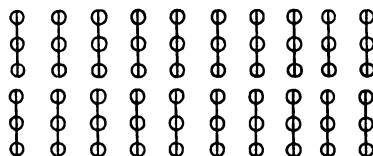
Care will be taken that the relation that two (2) bears to eight (8), and the relation that both bear to the quotient, are clearly perceived; otherwise the three figures will be thought to represent three independent quantities.

The division of tens and hundreds will be taught by illustration:



It is clearly obvious that three is in thirty ten times. It is something that cannot be explained. It must be perceived as a fact. In the same way it will be seen that four is in forty ten times; five in fifty ten times, etc.

The division of sixty by three will be illustrated:



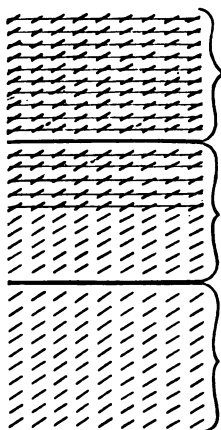
The quotient is obviously twenty.

Dividing three hundred by three, it will be illustrated:



Before the process has progressed far, the result will be anticipated. It will be seen that the quotient must inevitably be one hundred.

The division of three hundred by fifteen will be illustrated:



The quotient is in this case twenty.

By this method of illustration the pupil sees the relations that exist between quantities as necessary relations, and in the solution of problems he will learn to see their conditions as consistent with them.

The various forms of problems will be taught as language lessons. A new form will be presented with real conditions, using things in the new, but perfectly natural, numerical relation. The inevitable unknown quantity will be seen to exist in its relation to the known quantities. It will then be required that what has been seen shall be expressed in language, a question being written finally, asking for the unknown quantity.

There is no language so exacting as numerical language, and it may be said there are no ideas that are so clearly defined and at the same time so intimately related as are ideas of numbers and their processes. The effort should be made to bring into perfect accord the ideas in the mind of the pupil and the language used for their expression.

All problems presented for solution, so far as it may be expedient, should be illustrated by the pupil, showing that he understands the conditions involved, as also that he perceives the numerical relations existing among the quantities. This is, practically, mental arithmetic, as a problem may be solved without the use of figures. Some test is necessary other than a correct operation in figures. The illustration of the problem is a severe test; it shows in the concrete exactly what the figures represent and what the conditions express, and at the same time it makes significant every step of the operation in figures as representing a clearly understood process with numbers. As was said in the beginning, the method teaches numbers—the science of numbers and the art of computing them—by the use of numbers. The pupil learns to use figures and operations with figures merely to represent what he already knows as numbers and their processes. He never uses figures unless he knows their meaning and their purpose; he uses them because they are useful, always as a means to a clearly perceived end.

Understanding the relations of numbers in their various processes, he is never guilty of the absurdity of "subtracting" the figure 2 from

the figure 1 and getting the figure 9 for a "remainder," nor does he, put to the test, maintain that 109 and 901 are equivalent. Numbers exist for him as real things to be dealt with, and figures represent them. The problem becomes the familiar story, the conditions of which are verified by experience or are seen to exist consistent with possibility.

I am, in all this, developing the problem. I use, throughout the course, this system of developing the problem by presenting real conditions first, and the pupil gets acquainted with the processes with numbers, so that it becomes, as it were, a life experience to him. Teachers are all complaining of the great difficulty pupils have in understanding the language of problems. If they know these processes with numbers, the language is easy, because the language simply fits these processes with numbers, these conditions that they are familiar with, that are experiences to them. I say that they understand the problem written just as they understand a cat and mouse story; simply because the language expresses something that they can picture as an experience, or as a combination that they make. The language expresses something that is a part of their life; that they can verify by their experience. The trouble is, not that the language itself is difficult, but it is the numbers, or the figures, that are difficult. They do not know what the figures really represent, and they do not know the relations in which the quantities, with the figures representing them, stand to one another. I say that they must understand the relation in which the quantities stand to one another, just as they understand the relation in which the hunter and his gun the squirrel and the tree stand to one another, as an experience, in order that they may verify the idea that the language is intended to convey. And if they have had this experience they can do so intelligently. And so I say, when you give these illustrations over and over again, all manner of them, they have no difficulty in reading and understanding the problem, no matter how involved the language may be. I gave you a problem last evening in which the language was involved, and which did not contain any words that I saw would suggest the operations to be performed.

How many times have we asked the pupil why he subtracted? How many times have they pointed to the word "left?" They think that wherever they see the word "left" in the problem it requires subtraction. And where they see the word "at" they multiply. And they have catch words as we know. Where they see the word "each" in a question they divide. They are the key words to the operation to be performed, and the deaf mutes are very quick to catch at these key words to determine the operation to be performed.

MR. D. C. DUDLEY: Do you find any difficulty in illustrating promiscuous problems combining the four rules?

MR. BOOTH: None whatever. Of course, a difficult problem is difficult, but in the sense you mean, I do not.

MR. DUDLEY: I have often found pupils who understood the four rules perfectly, when separated, but when all combined in one problem, they are at sea.

MR. BOOTH: I should not teach in that way. I should teach both processes together. I should give them problems promiscuously, as you say, giving them problems in addition and subtraction—one or two in each—without any hint as to the operation to be performed. But when I give them problems throughout the course—in fact, when

I desire to draw out a new process with quantities and numbers—I require them to illustrate. If the problem is five times one sheep, I illustrate it in this way:

o o o
o o



That makes it realistic to the pupil. He can see there the real sheep, and he will have less difficulty in understanding it than if you put it "five dollars." I teach these different processes, or operations, entirely separate.

MR. M. T. GASS: Would you teach, in connection with multiplication, division also?

MR. BOOTH: No, sir; I should teach addition and subtraction together; that is, about the same time.

MR. GASS: Would it not be easy to teach that four times four are sixteen, and four in forty makes ten?

MR. BOOTH: I would have no objection to that, but I do not like to present too many difficulties.

MR. GASS: Don't you think that combining the two would often-times facilitate the teaching of these operations?


MR. BOOTH: Perhaps so. But I would teach addition and subtraction first, and get my pupils thoroughly grounded in those two processes, because multiplication is nothing more than complicated addition. I must teach addition first.


MR. GASS: But division and multiplication are very closely related. One is simply a reversal of the other.


MR. BOOTH: I do not teach it so. I teach that division is "subtraction times," subtracting as many times as you can until the quantity is exhausted.

And then there is another kind of subtraction that is altogether different from that. In the case of 300 divided by 3, it is very clear that it is "subtraction times."

Coming to fractions, here is the teacher's opportunity. If he has never taught numbers before, and has taught nothing but figures, or if the teacher who preceded him has taught nothing but figures, here is his opportunity. You can go back and teach simple numbers. After the class has learned operations with figures in the four rules, it is almost impossible to teach numbers to them. But when we come to fractions, this is our opportunity. We cannot only teach fractions, but we can teach simple numbers. What do we do? When I write the problem, the conditions of which will require the use of this part of a unit [one half,] whether it is apples or anything else, I will show to the class this half of a paper disc. [Showing.] I take the circle as my unit, because the arc of a circle suggests the unit. I take this in preference to a straight line, simply because there is no way of determining whether the straight line is a whole line or a half line. A straight line does not suggest a unit. I have used straight lines, but now I use circles, in which the unity is obvious to a deaf child. When a straight line is represented to him, he does not know anything about a whole unit, but when he is shown half a disc he does, upon its first presentation. You cannot explain it, but he must see it as just what it is. Then I tell him, without explaining why,

that this character $\bar{2}$ represents this shape . Of course it is relation; but to the deaf child it must be taught as representing shape.

Then I will take this shape , and teach them, at the same time, that the sign $\bar{4}$ is intended to represent it. And whenever I do anything that calls for that shape I shall require him to write that sign, $\bar{4}$. Then it is practice, and difficult practice, to drill the judgment. In this way they learn that the figure 2 under a line indicates a half, and the figure 4 under a line indicates a fourth. And all of the class have learned that in a few minutes.

They having arrived at the ability to make a distinction between quarters and halves, I will ask them to represent two fourths, and they see that it is necessary for them to take up two pieces of this shape, , and then I change the fraction to three fourths, and ask them if they know what that means, and many of them will pick up three of these pieces. In this way they have learned that the figure 4 under the line signifies that peculiar shape, and that the figure 3 indicates how many—the denominator and the numerator.

Having gone so far, we then teach addition, subtraction, and multiplication of fractions. The process of addition is the same in fractions as it is in simple numbers. I give two of these papers each representing a fourth of a disc, to one pupil, and three to another, tell them to put it down on their slates, and they will put it down, $\frac{1}{4}$ and $\frac{3}{4}$. I will ask them how many there are, and they, seeing it is addition, will put down $\frac{4}{4}$. They never think of adding the denominators, though I have never taught them not to. They have simply added the numerators. The numerators are significant of just what is added; the denominators signify just the size, and the size remains the same. Subtraction is taught in the same way.

A MEMBER: Do you ever write the word "denominator?"

MR. BOOTH: Yes, sir; sometimes.

MR. BOOTH: The following question is asked me, taken from the question box: "How long can the teaching of arithmetic be safely deferred?" It can be safely deferred quite a long time; that is, the time of the teacher can be given to the teaching of language a year, perhaps, before arithmetic as a subject of instruction is formally introduced. Of course the names of numbers, as adjectives, could be used in association with things, as it would be necessary in language, but I think it would be better to spend all of the time of the class upon language, rather than half the time on arithmetic and half the time on language. At the beginning of the second year I teach addition and subtraction, and the third year I teach multiplication and division.

MR. GOODWIN: In illustrating fractions would it not be well to vary the illustration, sometimes showing a ball, or an apple, as the unit, and dividing it into halves, quarters, sixths, and so forth?

MR. BOOTH: Yes, sir.

THE CHAIRMAN: The next subject to be considered is geography. The section will be led by Mr. Weston Jenkins, Principal of the New Jersey institution.

MR. JENKINS: Mr. Chairman, Ladies, and Gentleman: In estimating the value of school-room work, we need to distinguish between instruction and education. We need to reckon how much of the value of what we teach is in the intrinsic value of the facts imparted,

and how much in the training, which the study gives to the pupil's mind, which will enable him to appreciate and classify facts, and deduce his own rules from the underlying principles.

It does not need to be said to this audience that the latter is the highest kind of value. But there are some studies in which the intrinsic value of the facts is so great, the practical use which can be made of them is so important, that we may disregard the mental training, I think, which the acquisition of those facts implies. For example, arithmetic. While Mr. Booth has very clearly shown, and while the experience of myself, and, I presume, of all other teachers of the deaf, confirms what he has shown, namely, that the congenital deaf, or those deaf from early childhood, can be taught arithmetic successfully by a mere system of nemonics, yet it is taught, I think, to hearing children, very largely, in a way that involves almost nothing in the way of pure education and mental training.

I think that the majority of hearing children who attend public schools and use the text-books prescribed, get a competent knowledge of the operations of arithmetic in every day life, without any clear comprehension of the principles involved. And if we could teach our deaf children more readily in that way—if we could give that practical knowledge of arithmetic in a way more expeditious than by an educational system like that of Professor Booth, I think we should be justified in doing so. And if I could, in the course of two years, teach my children by any of the systems in use in our public schools, to solve the practical arithmetical questions that would come before them, I should feel justified in doing so, and should prefer that method to Mr. Booth's. Not knowing such a method, I should be very glad to adopt the educational method.

Geography is, as a matter of fact, taught in most of the schools on the instructional rather than the educational principle. I think that a perusal of the most popular text-books will show this, and very obviously, taking the conditions that surround the children, that process may be justified. People want to know geography very largely as a matter of convenience—as something that is conventionally expected of them—just as we learn to spell. Really, what is the use of mastering all the intricacies of English or of geography? It is a conventional accomplishment. A person who cannot spell according to the standards, loses a certain esteem—he does not hold position as an educated person. And so people learn geography. They learn the statistical part of geography, because it is rather a disgrace not to know it. When allusion is made to Singapore, or Vesuvius, or Saragossa, or the Rhine, we want to have some idea of what is being talked about, just as people read popular books that come out, such as Darwin's *Origin of Species*, or one of George Eliot's novels, who have no real interest in those subjects, but read them merely as conventional acquirements. And so it is very largely with geography, as studied in our hearing schools; and, perhaps, it is worth studying in our common schools in that way, and for that reason. But I think that in schools for the deaf, if studied in that way, the game is not worth the candle. The limits of the attainable are too closely drawn to justify us in spending so much time in going through so much, or, as Sam Weller's sharp boy says of the alphabet: "in going through so much to get at so little." It can be taught, I think, so as to have an educational value. The Scotch speak of Latin and Greek as the "humanities," and geography, if properly taught, is, for the deaf, a "human-

ity." It can be taught so as to make real to him objects that he cannot see—places that he can never visit—and it may make his interest in the world of matter and of mind more vivid, his conception of it more real, and so promote his happiness and welfare. That, I think, should be the object in teaching geography.

As to the methods to be pursued, and as to the extent to which it is to be carried, I will state my views very briefly, and shall ask assistance and explanation of methods from the teachers who are interested in this subject, and who are having practical class-room experience in it. One great objection to the usual methods of teaching geography is, even with a hearing child, the taking of text-books and beginning, as they do, with a string of definitions, the child getting no clear conception of what the definitions mean, or really what the words are. I remember my conception of the Rocky Mountains. I conceived a wall of earth studded with bowlders, such as I had seen in my native hills, the size of a small shanty, inclined at an angle of forty-five degrees with the horizon, rising two or three miles in height from a level plain, with a breadth at the base represented by a pyramid, and extending in an unbroken line from Alaska's shore through the continent, until they began to be called the Andes, or something else.

We should begin by making these terms real to the child, and should begin with one's own immediate neighborhood. I think the most of our schools are in, or in the immediate vicinity of, a city. I would have my child's experience with maps begin with a map cut from the city directory. If he is shown, for instance, the institution grounds as marked upon the map, he will recognize it and other objects in the vicinity, and with a forty-foot tape measure, or a ten-foot pole, or something of the kind, he will get the idea of dimension, and the idea of direction, and the points of the compass, and estimate the distance from there to the State House or the City Hall. In that way he gets the elements of geography; he gets what we try to teach by definitions in the book from objects implanted in his mind. I will not give my ideas at large, as I find from conversation with a number of ladies and gentlemen here that they have honored recent articles of mine in the "Annals" by careful reading and understand my position, and can criticise it very intelligently; and besides, I desire to hear from others.

I merely indicate the error in the usual way of teaching geography, something that is not adapted to our children, and recommend the entire isolation of a certain class of facts which are put together in geographies from all other facts in the universe. Of course it is convenient for us to classify certain facts together as a sentence. But students are apt to get an idea that what is contained in a book is all there is about a certain subject. They do not get the idea that there are other facts related to them. They do not get the idea of the poet:

"Flower in the crannied wall,
I pluck you out of the crannies,—
Hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

I think that our children are tied to statistical description, of geography, as it is called, and then, if they have gone through the book *satisfactorily*, they are taught physical geography, and then, in a more

advanced stage of their education, they are taught botany, mineralogy, and so forth.

But it seems to me that in teaching our children about any locality, it is better to teach them all of the facts they are likely to remember, together, in a group, with present points of attachment for the grasping of new facts. There are many facts which are usually reserved for the higher text-books, which can be just as well taught to children in the intermediate grades, as they can to older people. For example, winds, currents, rainfall, and all that is usually classed as physical geography. The primary and intermediate grades are not supposed to know anything about it, and yet it is just as easy to remember as the soil and productions which are given in the primary geographies; and they furnish points of attachments for new facts. The pupil is more apt to remember, and more apt to join on something new that he may learn to a statement of those conditions, than he is to a dry enumeration of the products, soil, and climate.

Now, as to the means and methods that can be used in teaching in this way. I have found it convenient myself in teaching a class of mine to string all of these things together on the thread of the commercial relations of one country to another. I have found that anything new that the pupils get hold of or that I get hold of, I can string on and put in such a light that they add it to those that they have already learned, and make it their own.

As to the methods of illustration, there are many teachers in this audience who are familiar with and expert in teaching by the use of the sand table; and I should like to know what they have done in that direction.

MR. SPRUIT: We have a number of tables, the bottom made water tight, provided with a small flange an inch or inch and a half high running around the four sides; and this with a bushel or so of sand is about the whole apparatus. If we have a State or continent to represent, we model it as it would be modeled in clay for a blind pupil; clearing the sand entirely off from the bottom where the water is to be. Of course the sand is dampened so that it will stay in place where put. Then it is a very easy matter to pour in a quart or two of water to represent the seas and lakes and many little channels increasing in size from the top down to the bottom for the rivers; and put in a toy house or two or a dozen to represent a city; and perhaps a few twigs to represent a forest. Of course this requires a considerable stretch of imagination on the part of a pupil to transform this into a map or model of a State or continent. But with the aid and assistance of the teacher, he is able to do this in almost every case; at least it is much easier for the pupil to understand what we are trying to get at by the physical contour of a country when represented in this way than when represented merely by the colors on the map or on the wall.

We also use this to a certain extent in teaching physical geography. It is sometimes very difficult to make pupils understand how water gushes out in the form of a spring. But if the sand is piled up a little, and a slate put in and more sand piled on top of that, the slate being placed at an angle and the sand sloping up, the slate representing the impervious strata of rock; then when the water falls upon this hill or mountain and runs out in a stream below, he sees exactly how a spring is formed. A hint of this will be sufficient for you to see the many uses to which this sand table can be put. You can use it

not only in teaching geography and physical geography, but sometimes for arithmetic, and for various other purposes. It is a piece of school apparatus that we have found very convenient.

MR. JENKINS: I should be very glad if Miss Harris would explain somewhat her mode of teaching these branches.

MISS R. R. HARRIS, of Maryland: In teaching geography I do not believe in burdening the memory of the pupil with a long list of localities of which they will probably never hear after leaving the school-room. To avoid this, I have taken a "Cornell's Intermediate Geography," and selecting such matter as I thought best for general use, have prepared lesson papers for my class. These lessons have been printed and then distributed to the pupils, who use them in connection with the maps given in the geography, while preparing for recitation. When they recite the outline maps are used, the pupils pointing out each locality after he has stated the situation. They are very expert at this exercise. In connection with the geographical situation of important lakes, rivers, towns, etc., I also teach the productions of various countries and the occupations of the inhabitants. In doing this I endeavor to make the pupils understand that these countries, in many respects, resemble that in which we live; that they have an abundance of grain and fruit, as *we* see them in summer, or are covered with the ice and snow that the winter brings to us. In the same way I try to make them realize that the towns are much like those in which we have our homes, consisting of wide streets and narrow streets, public buildings, elegant residences, and squalid huts. To impress these facts upon their minds, I bring in specimens of the productions of the country under consideration at the time, whenever it is possible to obtain them. The pupils are allowed to examine and, if so desired, to taste them. Pictures of the important streets and buildings of a city make that city a real place to them, while the relation of some striking historical event or legend connected with the place serves to heighten the interest. I teach the names of the principal foreign rulers, wishing the class to understand that as we have a President and Governors, so in other countries there are Emperors and Kings. In this manner I endeavor to make the study of geography, so often considered dry and uninteresting, a live subject, full of interesting particulars. You would be surprised to see how much general information these pupils have acquired, in connection with the situation of towns, and the sources and general courses of rivers. I have neglected to state that I also teach the principal railroads of our own country, stating their length and the chief towns through which they pass. The pupils trace out the various routes on the maps, and become familiar with them as the great highways of travel and commerce. If a boy's father writes that he is going from Baltimore to Chicago, he can frequently tell me through what important cities he will pass. I have met with great success by the use of this method.

MR. ELMENDORF, of New York: I think that is geography, and I teach it in a similar way, using at the same time the magic lantern or stereopticon. I begin by teaching the geography of New York, asking a pupil if I sent him to Twenty-third Street, in which direction would he go. And if they want to go to the Academy of Design, I ask them if they have any idea where it is. I begin with objects right around me, things that they have seen, so that they get a slight idea not only of its direction from the place where they are at the

time, but they get an idea of the time it will take for them to go there, and what they will find when they get there, and what they intend to do when they get there. I begin in that way, and then I go to, say, Philadelphia, for instance. And I ask them where is Philadelphia. I begin by teaching the simplest divisions of the country first. I ask if any of the class have ever been there. I very rarely find one who has been in a city so far from New York, except those who come from other cities. Suppose there is one there, I get that child to tell me all he knows about Philadelphia; and then I bring my magic lantern to show them pictures of the city, and they get an idea that it is a large city, and the first thing they want to know is which is the larger, Philadelphia or New York; and I tell them and ask them which they think is the nicer of the two, and get them interested in that city, and ask them if they have any friend there. Then I show them photographs of the principal buildings. Take the City Hall, for instance, and ask them if they think it is like the New York City Hall. And I make them associate their ideas with things they have themselves at home; and I not only do that with home cities, but also bring in the magic lantern to illustrate these pictures by a perfect photograph of what they are going to see. The children, when they are through these studies, will be able to tell you not only where each city is, but something about the chief buildings, and upon what railroads they are and how many, and how much it will cost to go there, and how long it will take to go there. That kind of geography I believe in, for deaf mutes at least. I give this as simply an illustration. I do not wish them to say that Philadelphia is in the southeastern part of Pennsylvania, but I want them to know the location, so that if they desire to go there they can do so without very much trouble. I begin with home topics, and go abroad afterwards.

A MEMBER: I would like to ask Professor Elmendorf how often he uses the stereopticon?

MR. ELMENDORF: I show it to the young scholars about every three weeks. I only have geography three times a week, and I may show it to the geography class once a week for about half an hour, and show them pictures of one city. All of our rooms are so arranged that we can show it in the daytime. Our pictures are about three or four feet.

A MEMBER: Where do you stand when you explain this panorama?

MR. ELMENDORF: I teach orally, and I stand right against the wall, where there is some light from the picture thrown upon me. In this way I show every important city in the United States that I think it is necessary for them to know.

MR. CONNOR: One of the great difficulties that I have had is to get the pupil to understand that a map is an outline of a section of country. They are disposed to look at it as a piece of red, blue, and green paper hung up on the wall somewhere. In order to get that idea out of their minds, my plan is to take a map and spread it on the floor, and place the points of the compass upon it. I think that is very important, that the child may get correct ideas of these things, and understand that the map is intended to represent something tangible.

MISS DUTCH: I think one good way to accomplish that is to have the children occasionally draw maps from memory; to take their slates and give a rude outline of the localities of the different States,

and their relation to one another. You will be surprised to see what accurate ideas the pupils will sometimes have of the States, and their relation to each other. I also ask questions, such as "Who sits north of you?" "Who east?" "Who northeast?" etc.; and "Whose room is north of this one?"

MR. Z. F. WESTERVELT: I think there are many of us who have not magic lanterns or stereopticons, who can make use of pictures with very great advantage. One of my classes has been taught by the aid of "Picturesque America," which contains pictures taken all over the continent. They have used this book in the school-room regularly, and it contains a great many pictures of every place and part of the country. There are very few of our institutions that do not have in their library, or that the Principal, or that some of the teachers do not own beautiful pictures that are very easily shown to the class. If they would use these—and there can be no better use for them, however valuable the book—it would enable them to teach geography very easily, and rapidly. It does not require a stereopticon, or darkened room, or anything else that would be impossible for some of us to obtain. We have used this means of teaching geography, and we have also used a large model of soft clay; making a model of a map, putting in pegs to locate cities and towns. We have found the clay better than sand, for a model. We put pieces of looking glass in the clay, to give the levels of the rivers, to show how the water could run down, as it would run, when poured into Lake Erie, down over the Falls of Niagara, into the Niagara River, and into Lake Ontario, and so on out; and to show how the water runs down the Hudson River, seeming to flow in an opposite direction.

We have also used a map upon the floor, but the children could not be made to understand location or direction from any of our other appliances or pictures until we had a large map painted upon the floor in the school-room, with wooden blocks, with the names of the different buildings in the city, which they were obliged to locate. All these appliances, I suppose, are used in other schools, and they are simple, and easy to use. But pictures are not resorted to, or used as much in the schools as we think they should be. We would urge those who have valuable books, containing pictures, to give them to this use.

MR. D. C. DUDLEY: I think, if we had the means at our disposal, we ought to have such maps as they have for the blind; maps, and globes in relief.

I would not begin teaching a class geography, until they were able to converse with me very freely in the sign language. We would then have before us the globe in relief, showing the different countries, giving a conception of the world as a whole. I would not begin with the school house and school yard, but rather with the world as a whole. I would talk with them about the distance around the world; how long it would take us upon the cars, traveling twenty-five miles an hour, to ride around the world, and all about it, in that way. Then, I would take out a little section of this great world, and show them that it was so much upon the globe, but we would spread it out and make it larger, for convenience. And we would have a map of the United States in that way. And I would let the pupils travel about from one State to another, all over the country.

MR. JAMES SIMPSON, of Dakota: I have no magic lantern, and am doubtful if I have pictures; I teach with a map of the United States

on the wall, and use it every few days. I get newspapers, and explain to them about the riots in Chicago, and ask them if they know where Chicago is, and to find it on the map; and I tell them it is the largest city in Illinois, and all about it. The next day the newspapers bring news of the railroad strike, and I ask them to find the railroad on the map. In this way the pupils remember for a long time what they are taught. I also take thirty-nine girls to represent the United States, each girl representing a State, and have them look for the name; and I will explain to them that Dakota was not a State, which would reduce it to thirty-eight. If you give them something interesting, it will fasten itself in their minds, and they will remember it. Give them items of news from the newspapers every day, and it will be very interesting and help them in gaining a knowledge of geography, and also language and spelling. I would make use of current events in the teaching of geography. When the children read that something has happened in some part of the country, I would immediately inquire, "Where is that place? Find it on the map, and tell me all you know about that town."

MR. JENKINS: I will explain briefly why I begin as I do, and as Professor Elmendorf does, and not as Mr. Dudley would, in teaching geography. And I can show the correctness of my idea by reference to the parallel study of astronomy. While all boys who attend our schools know something about the Copernican theory of astronomy, I think they know less about the actual facts before their eyes than persons did many hundred years ago. You take the Book of Job, and you read of the sweet influences of the Pleiades. You take Chaucer, who wrote for common people, and you will find that he assumes that the plowman and the miller knew about the constellations, knew about the rising and setting of the stars, and knew of the backward motion of the sun and stars. I do not believe that the same class of people know anything about that to-day; I do not believe that one person out of fifty who knows that the earth moves round the sun, knows that the sun moves backwards among the stars. And the reason is that the people have ceased looking at what the stars tell them and take what the book tells them. As a matter of fact, I believe it is easier to take a boy whose mind is rooted and grounded in what his eyes tell him about the heavens, and make him understand the Copernican theory of the solar system, than to take a boy who knows all about that theory but has not used his eyes and to make him understand it perfectly. So, I think it is easier to take a boy who knows how to go from the State School for the Deaf Mutes, in Trenton, New Jersey, down to the State House, and knows how far it is in miles, and just about how tired he would be if he walked it, and all that sort of thing, and teach him the shape and size of the earth, than it would to take a boy who has grasped the earth as a unit; who has looked at the globe and map and then got it thoroughly into his head that from this little spot on the map to the other is ninety miles, and how long it would take an express train to go, and that it would cost him one dollar and seventy-five cents.

REV. GALLAUDET: I have been so long out of the class-room that perhaps I can hardly add anything of interest or profit to this discussion. But if I recollect right, I found geography—that is, the names of cities, rivers, and places—a sort of alternative to the excessive practice of language. Such little exercises as these were of interest to the class, and would stimulate them in their studies. After they had

gone through this preliminary work, to give the deaf mutes a general idea of geography, it seems to me acts as a stimulant to them. They want something like an intellectual gymnasium. Let the pupil write all the names of cities, rivers, mountains, and so forth, that he can think of that begin with "A," and tell in what countries they are. He will not at first have a distinct and clear idea of them, but he will know that they are spots on the earth called by those names. And that very exercise would assist him in the study of words, and tend to make him interested in all parts of the earth; and by using his memory in that way you quicken his intellect. And as teachers often wish to have pupils employed at something while they are correcting compositions or something else, tell them to get their slates, and let them engage in exercises of this kind to show how much is stored in their memory.

I think that geography interests pupils very much. I have found them interested in learning the names of cities, mountains, and rivers all over the earth, and it has astonished me to see how much they remembered correctly. I would have them write a whole list of places beginning with "A," and have them tell me where they were; and then I would take up all places beginning with "B." This plan used to help me very much in keeping the pupils busy; and they were all interested in it, and it was useful as an intellectual gymnasium.

Here the section adjourned until Monday morning.

THIRD DAY.

The convention met Sunday afternoon at three o'clock in general session, President Gillett in the chair. The attendance, which was small when the assembly bell rang, gradually increased until five o'clock, when a majority of the members of the convention were present, earnest listeners to a discussion of the moral and religious phases of this work. The subject as ordained by the Business Committee was "Sabbath Exercises in an Institution for the Deaf and Dumb."

PRESIDENT GILLETT said that it was the practice in the Illinois institution to deliver a lecture or sermon every Sabbath morning, and in the afternoon a meeting of teachers and pupils was held. At this meeting he generally read the verses of a psalm alternately with one of his teachers, the pupils following, and repeating in the sign language the verse as repeated by the teacher. They then recited the Ten Commandments, the Apostles' Creed, and the Gloria Patria. The lesson was then read and the pupils repeated a hymn, generally with a chorus. It was very beautiful to see these pupils reciting in concert in the sign language, and the exercise never failed to produce the most excellent results. President Gillett then assumed that the convention was a Sunday school for deaf mutes, and that he was the superintendent, the members of the convention being the pupils. Mr. Walker acted as interpreter. He announced the hymn beginning "The Lord is in His temple, let all the world keep silence before Him." The exercise was carried out as President Gillett suggested, and was indeed impressive, the members standing and repeating in

the silent eloquence of the sign language the ideas of the hymn, as interpreted by Mr. Walker, the only sound audible in the hall being the rustling of clothing as the arms and hands of the assemblage gave expression to the beautiful thoughts. Mr. Gillett then read a passage from the Scriptures, selecting Luke IV, beginning at the fourteenth verse, descriptive of Christ's entry into the synagogue at Nazareth. He also read the passage descriptive of the Savior's departure from Galilee and the miraculous cure of the man who was deaf and dumb. Mr. Weed then led in prayer, closing with the Lord's Prayer, which was repeated in concert. Mr. Gillett then called five young ladies and two young men, all of them deaf mutes, upon the platform, and gave them the hymn "Jesus, Lover of My Soul," with the chorus:

"I do believe,
I will believe,
Jesus set me free."

The verses of the hymn were recited in the graceful movement of the sign language by the mutes, each repeating a verse, at the close of which they gave the chorus in concert. Mr. Gillett explained that exercises of this kind interested the pupils more than his lectures could, and being appropriate for the occasion prepared them for what he had to say later.

J. A. McCLURE, of Nebraska, then read a paper on

MORAL PHASE OF OUR WORK.

The work of educating the deaf has assumed vast proportions in this country, from its small beginning at Hartford, about three quarters of a century ago.

The rapid progress of this work, and the zeal and devotion manifested by so many who have devoted their lives and best energies to the elevation of this unfortunate class of our citizens, speak volumes for our Christian institutions and the philanthropy of our people.

Ours is truly a missionary work of no small importance, and may we not safely say, that it stands at the head of the list, in this respect, for reasons that we shall mention.

The importance and imperative necessity of the *moral instruction* of the deaf, may be better understood, when we consider the utter darkness which envelops the mind of every uneducated deaf mute, who has had no opportunity of gaining knowledge before becoming deaf.

I think that every congenital deaf person in this audience will testify to the fact, that the uneducated congenital deaf mute can have no correct knowledge of God or their relation to him; no conception of the plan of salvation through Jesus Christ; no idea of a future state.

Was it not such reflections as these that prompted our noble Galaudet to abandon his plans and prospects for a useful life in the ministry, and devote his rare talents and energies to the lifting up and enlightening of these neglected ones.

Such an inspiration could not have been other than from above; and the zeal and consecration with which he entered into and pursued the work to a successful issue, has won for him the admiration of the world; the most profound respect to his memory, of every lover of humanity; and may I not say, a crown that shall be adorned with many jewels.

I have felt that the *moral phase* of our work has not been given sufficient prominence in our conventions, or in our institution papers.

A grand work has been done, and is being done, in all our institutions, in this direction; but it seems to me the time has come when greater effort should be put forth for the *moral development* of these unfortunate children, intrusted to our care and instruction. We should strive by example, by precept, and by every means in our power, to lead them to the Rock that is higher than we, not ceasing in our efforts until they are led into the light, and give evidence of true and thorough conversion. Who is more capable of doing this work than the earnest Christian teacher? For such, I trust, is every one engaged in this important work. By improving the various opportunities that present themselves, the mind of the child may be gradually impressed, and led step by step in the way of life.

This I believe to be the duty of every one who assumes the responsible position of an instructor of these unfortunate children.

Every one who has any experience in this work knows how entirely dependent are these children upon their teachers for all the knowledge they receive, and with what implicit confidence they look to the teacher for new light upon any subject that may be presented.

Especially is this true in regard to spiritual things. When once the mind begins to unfold to a realization of the fact that it is possessed of a spiritual life, that "it is not all of life to live, nor all of death to die," with what earnest desire does the pupil then look to the teacher for truth and light. If this desire be satisfied by the teacher to the best of his or her ability, when first awakened in the mind, then may the child be easily led in the way of life, almost unconsciously to itself. But if the true light which it so much desires be withheld, and something else substituted in its place, there is danger that the impressions made upon the mind may result in diversion from the truth, and perchance moral wreck. Who is responsible for such a result? Can any teacher prove false to such a trust? I tell you it is no trifling matter to assume such responsibilities, and we cannot throw them off. "He that winneth souls is wise; and he that turneth many to righteousness, shall shine as the stars, forever and ever."

The condition of a deaf mute child is vastly different from that of a speaking child. The latter has opportunities of hearing the conversation of those around it, and of being instructed in Sabbath school, or by religious parents; but the former is entirely shut out from any knowledge of these things until made known to it by the teacher. When we consider the fact that the earliest impressions of the mind are the most lasting, and have the greatest influence upon the life, how important that we, as teachers, be faithful to our trust, and see to it that good seed shall be sown in this *fertile soil*, prepared by the divine hand for its reception. The value to these children of the cultivation of their *physical* and *mental* powers cannot be estimated; but, after all, they should only be considered as stepping-stones, or helps, for their higher development into a *spiritual life*.

The regular chapel services that are observed in most of our institutions are very good in their place, but are not sufficient for the accomplishment of this important work.

Prayer meetings should be organized for the pupils, and encouraged by the presence of as many teachers as can conveniently be present; in which all the larger pupils should be encouraged to take

a part, and to feel that it is their meeting, and that it is profitable thus to wait upon the Lord, and renew their spiritual strength, at regular stated times.

As the body requires food regularly for the preservation of natural life, so must the soul be fed daily from above, with new supplies of grace, that it may live and grow into perfect spiritual manhood.

The teachers should make it a point to drop in to these meetings as often as convenient, and sometimes when not entirely convenient, and encourage the work by their presence and counsel. Hold up Christ before them as the *Chiefest* among ten thousand, and the *One* altogether lovely. The only *name* given under heaven and among men, whereby we must be saved. By such special efforts and services the pupil is brought into more intimate relation with God, and is made to feel that it is a solemn thing to approach into His presence.

We have been holding such special meetings in our institution at Omaha for the last two years, and great good has resulted to the pupils; not only in the moral growth and development of many, but in general good order in their daily lives. "Godliness is profitable unto all things; having the promise of the life that now is, and of that which is to come."

I believe this to be the grand secret of true success in any institution. "Get the heart right, and the life will be right;" but while the heart and mind remain under the influence of sin, how can we expect good order, or the best results in any direction?

I think also that special effort should be made, by conversation with the pupils separately on this subject, as his or her case may require. In this way we may gain their confidence, and be able to give them such necessary advice or encouragement as cannot be done in the promiscuous gathering. They feel that we are interested in them individually, and are much more likely to heed the admonition given.

Such work may, and should, be accomplished without introducing any sectarian dogmas or isms. Give them the pure milk of the Word; and, like Paul, "know nothing among them save Jesus Christ, and Him crucified."

God speed the day when our institutions shall vie with each other in holding up the banner of the Cross, by a holy zeal on the part of every teacher and officer for the spiritual well-being of all their pupils, and in recording them as Christian boys and girls, when going out from the institutions to engage in the more permanent and active pursuits of life; then shall they be prepared for good citizens, and shall be factors in the great work of evangelizing the world.

MR. NOYES read a paper on "The Importance of Religious Training for the Deaf and Dumb." He considered the moral and religious element of the utmost importance in institutions of this character, and did not think any man fit to be Superintendent of such an institution unless he was a godly man and professed his belief before the whole world. If it was necessary that any family should be imbued with religious ideas, it was that gathered within the walls of a deaf and dumb institution. He then detailed the Sunday school methods of the Minnesota institution, stating that about one third of the pupils there were of Roman Catholic parentage, and that the exercises were broad and undenominational enough to include every sect without offending the prejudices of any of them. A monthly review

and examination in the work were features of the Sunday school in this institution.

PROFESSOR HOTCHKISS, a deaf mute, described the Sunday school work at the Washington College, where the Sunday school has an entirely separate existence from the college itself. A feature of the work in this institution was the contribution of money by the pupils for charitable purposes. On one occasion they contributed \$80 per annum for the education of a pupil, a native girl, in Smyrna. Local charities are also assisted. Last year they sent money to Alaska for the education of the Indians in that Territory, and a short time ago they donated a sum to assist the deaf and dumb institution recently organized in Santa Fé.

DR. GALLAUDET, of Washington, thought that all instruction should be undenominational, and they could not be too careful in the avoidance of anything that might tend to give an institution a denominational character. Religion should be plainly and constantly taught. A spiritual religion should be taught, a religion that inculcates the idea of a future life and that man possesses an immortal soul. The institution should be erected in the fear of God rather than as a peculiarly Christian establishment, for the Israelites are as God fearing as any Christian, and their tenets should be respected. It would not be right to proselyte among the pupils, and they should be allowed and encouraged to grow up to honor the faith of their parents. They should be taught that this is a free land and that it is wrong for one to say to another, "I am better than thou." He was earnestly opposed to having the public money used for denominational purposes in the education of the deaf and dumb, and he would go so far as to advocate that sectarian religious training be put without the walls of every institution in the country. In his own practice no line was drawn between the Roman Catholic and the Protestant, any more than there was between the Baptist, the Methodist, and the Presbyterian. He had carried out this idea in the Washington College, and at their last exhibition, Father Doonan, of the Georgetown University, and chief of the Society of Jesus in this country, had, at the conclusion, delivered an extemporaneous prayer and pronounced his benediction and blessing upon the institution.

MR. WEED delivered a discourse on "Missionary Work in Deaf Mute Institutions," in which he claimed that as the instructors of the deaf and dumb stood in the same relation towards their pupils as parents, they should train them as parents would in teaching them their religious duties.

MISS CAMP, of Ohio, gave her experience of what may be accomplished in Sunday school work among the deaf and dumb.

RELIGIOUS SOCIETIES AMONG THE DEAF.

Some years ago, Miss Sarah Perry, a young lady teacher in the Ohio institution, commenced holding weekly religious meetings among the girls. It was her custom to instruct them concerning their spiritual needs and daily duties. These gatherings were, I am told, invariably well attended and bore good and lasting fruit. It was my good fortune to meet and to know her during the first few months of my work as a teacher previous to her death, which took place in the year 1879.

Three years later, on having become sufficiently familiar with the

sign language, it was my privilege to take up and carry on the same general plan. At first only four or five young ladies attended the meetings, but soon the interest grew, and before the month was out some forty had enrolled their names as members of a society aiming at better Christian living and feeling among themselves and toward officers and teachers. A set of resolutions was drawn up and signed, and the society, at a subsequent meeting, was christened "The Sarah Perry Society," in honor of its deceased founder. At the close of the first year some fourteen or fifteen had joined their respective churches. The membership increased to about one hundred the second year, and has since maintained that number. Some forty in all have become church members during a three-year experiment.

I have, of course, as leader, met with many discouraging circumstances, and with difficulties more or less trying and serious, and which more experience on my own part may have averted. There were the usual number of lukewarm and disaffected members also, common to organizations of all kinds; but the steady improvement of some and the earnest leadership of others convinces me that much good may be accomplished by some such means.

In the days of the elder Dr. Gallaudet the religious education of the deaf was looked on as a sacred duty. Perhaps in our efforts to train them mentally we overlook some of their spiritual needs. True it is, Christ alone can change the hearts of men, but there is much we can do toward leading His children to His feet. I have found by experience, that *personal interest in the individual pupil* is the surest way of gaining his or her attention on religious subjects. Given a society of some such kind as described above, no matter how small or feeble, the mere being united and brought into personal contact with each other and the leader, has in it a power to make and hold interest beyond words, to say nothing of its being a valuable auxiliary to regular church work.

MR. HASSENSTAUB, of Illinois, a deaf mute, detailed methods by which the Sunday school work may be made very interesting and instructive to deaf mutes.

WARRING WILKINSON, of the California institution, said that the Sunday school in that institution was purely an affair of the pupils. The classes were all conducted and instructed by the pupils, and the credit and honor of its organization was wholly due to Mr. d'Estrella, a pupil, who had been its Superintendent for twelve years. The value of this method was apparent in the fact that it brought the pupils into active work and inspired them with a certain responsibility. He had attempted to exercise no control over them in any particular, and he was certain that lasting beneficial results had been attained.

PROFESSOR CROUTER, of Philadelphia, stated that the work in that institution was very similar, and the results were very satisfactory, because the pupils take an individual interest in the work. In the Philadelphia institution the Catholic children attend mass and the Catholic Sunday school, returning to the lecture and sermon at the institution.

MR. MOSES, of Tennessee, described the methods in that institution, which are similar to those of the California institution, the Superintendent being a deaf mute, and the more advanced pupils acting as teachers. He had found that under these conditions the lessons were more thoroughly learned than in any ordinary methods.

ERASTUS BROOKS, of New York, stated that in that State a general appropriation of money was made for the support of six deaf and dumb institutions, one of which was filled with Catholic children and another by those of Jewish parentage. In answer to questions by members of the convention, Mr. Brooks stated that these latter schools were supported out of State money.

DR. GALLAUDET said that it was his conviction that when a State allowed money for the support of a denominational institution, even though that institution may have become so after its establishment as a public institution, they acted inconsistently with the spirit of our Government. He would object to the division of public moneys for the support of Baptist, Methodist, or Presbyterian institutions as much as he did to the appropriation of money for the Roman Catholic or Israelite. He felt the same in this matter as he did regarding the money appropriated for the public schools, and he was not aware that any State had ever appropriated money for the support of denominational public schools. He did not blame the Buffalo and Fordham institution managements for getting all they could out of the State, but the fact that they were permitted to exist as separate denominational institutions, supported at the public expense, was certainly contrary to the spirit of American institutions.

PROFESSOR NOYES, of Minnesota, thought that a parent could send his child where he pleased, and the State had no right to dictate in the matter to compel him to place his child in any institution where the preponderance of religious instruction favors any one denomination. All the State required, and all that they could take cognizance of, was the education of the child. The pupil should receive good moral instruction, and permitted to have nothing to do with sectarian religion as far as the institution was concerned.

The convention then adjourned until to-day, at nine o'clock.

MONDAY, JULY 19, 1886.

MORNING SESSION—NORMAL SECTION.

The Chairman, Mr. Ely, called the meeting to order; and the Rev. Job Turner offered up a prayer.

MR. WEED: The first exercise this morning will be conducted by Miss Harris of the Maryland institution, the exact nature of which she will at once explain.

MISS R. R. HARRIS: The language exercises of which you see an illustration on the slate, are not designed as foundation work for the structure of language or for lessons in grammar. The pupils with whom I use this method have a fair use of English and the difficulties of tense have been surmounted to a considerable degree. When called upon to write a letter or story given them in signs, their work is quite satisfactory. And yet, in these letters and stories I frequently find an ignorance of some term or phrase in daily, almost hourly use, connected as it is with the life of the household, the duties of the school-room or workshop, or the pastimes of the playground. Other teachers of intermediate classes have no doubt had the same experience. This ignorance is the fault of neither teachers nor pupils, who

through a period of four or five years have been occupied with primary lessons in language.

Text-books and original lessons have supplied the pupils with a large stock of words and phrases which they use with a fair degree of fluency. They have acquired much that is valuable during the time they have been under instruction. We all know, however, that to these pupils, and even to those of a higher grade, the vernacular, as one may say, of every day life is almost a sealed book. Here and there are expressions with which they are familiar, but in the majority of instances this vernacular is for them an unknown tongue. For instance, when told "Make up your bed," the pupil understands what she is to do, but when requested to "tuck in the bed clothes," or to "turn them down," she looks at you inquiringly and asks "What do you mean?" She knows that her mother mixes flour, yeast, and milk to make bread, but she does not know that this mixture is called "the sponge" or that her mother "sets it to raise." A boy goes on a fishing excursion, and in writing an account of the adventures of the day, he says that he put a worm on his hook and a fish bit the worm a little, but he did not catch it. This statement is sufficiently clear, to be sure; we know what he means; but would it not be better did he use the terms common to this sport, and say "I baited my hook," "the fish nibbled the bait?" "The doctor held my wrist" writes a pupil when he wishes to say "The doctor felt my pulse." Instances could be multiplied where expressions used only in connection with particular subjects are greatly needed by the pupils of all our intermediate classes. To meet the wants of my own class I have prepared a series of lesson papers resembling in form the following exercises:

CHURCH.

Nouns.

Cathedral. Meeting-house. Church. Church-bells. Steeple. Vestibule. Gallery. Middle-aisle. Side-aisle. Chancel. Font. Altar. Pulpit. Lecturn. Bible. Chapter. Verse. Text. Hymn-book. Hymn. Doxology. Prayer-book. Prayer. Organ. Organist. Choir. Collection-plate; basket. Communion. Communion-service. Priest. Minister. Sermon. Sexton. Congregation-Elder. Steward. Deacon. Denomination. Episcopal. Methodist. Presbyterian. Baptist. Lutheran. German-Reformed. United-Brethren. Quaker. Roman-Catholic.

Adjectives, Adverbs, etc.

Congregation—Large; small; attentive.

Services—Solemn; impressive, etc.

Sermon—Eloquent; fine; interesting; instructive.

Music—Fine; sweet; good.

Phrases.

Services are held at —.

The church bells ring.

— attend church.

— conduct — to a seat.

— walk up; down the aisle.

— kneel.

— offer prayer.

— bow — head.

— announce the text, hymn, etc.

— make the announcements.

— sing —.

— unite in singing.

— play on the organ.

— offer — to —.

— accept —.

— preach.

— listen to —.

— take up a collection.

— put — into the collection.

— receive into the church.

— confirm —.

— unite with the church.

— belong to the church.

— is a member of the church.

— administer the communion.

— commune.

— baptize —.

— sing the doxology.

— pronounce the benediction.

— dismiss —.

SICKNESS.

Nouns.

Appetite. Diet. Headache. Chill. Fever. A sore throat. Pain. Stupor. Delirium. Attack. Disease. Eruption. Blister. Tongue. Pulse. Stomach. Doctor. Patient. Nurse. Medicine. Dose. Drops. Pill. Powder. Prescription. Label. Drug Store. Druggist. A teaspoonful; tablespoonful of —. Sick room. Hospital. Message. Telephone message. Telegram.

Adjectives, Adverbs, etc.

Person—Thin; pale; weak; sick; ill; worse; delirious; conscious; unconscious.
Throat—Inflamed; ulcerated; swollen.
Tongue—Coated.
Face—Flushed.
Lips—Parched.
Pulse—Quick; slow.
Disease—Contagious; infectious; dangerous.
Every hour; every two hours. Once a day; three times a day.
Before meals. After meals.

Phrases.

What is the matter?	A fever increases; passes off.
How do you feel?	— suffer.
— lose — appetite.	— fall into a stupor.
— have a poor appetite.	— is at the point of death.
— fall off.	— open —' mouth.
— look pale; thin.	— put out — tongue.
— complain of —.	— examine —.
— feel weak; sick.	— feel —' pulse.
— get sick.	— prescribe for —.
— get well.	— write a prescription for —.
— become (grow) ill.	— give directions about —.
— become (grow) worse.	— follow —' directions.
— feel sick at the stomach.	— give a dose of medicine to.
— vomit —.	— put a blister on —.
— break out with; is broken out with	— dress a blister.
measles, etc.	— gargle the throat.
The head aches.	— mop; paint; spray the throat.
— have a headache.	— take a disease from —.
— have an attack of —.	— sit up with —.
— have a sore throat.	— air the room.
— have a pain in —.	— send for —.
— have a chill.	— telephone for —.
— have a fever.	— telegraph for —.

These lesson papers deal with subjects which form the general topics of conversation in ordinary, everyday life. The forms of expression given are not always the most elegant, but they are in constant use, and are therefore essential to the pupil. My aim has been to supply my pupils, not with all the expressions common to a given subject, but with those most important. So far as possible, I have limited the vocabulary and the idioms, wishing to avoid any confusion of ideas that might arise from a more extended lesson. The success of these exercises with my class has been most gratifying. They have showed the greatest interest in the subjects as they have been presented, and their compositions written upon this method have been most creditable.

When introducing a new subject, I place it upon the slate in the form as here presented. A careful explanation of the vocabulary, and of the phrases then follows, with frequent illustrations, given either upon another slate, or by means of the manual alphabet. When sure that the lesson is fully understood, the pupils are required to write a composition upon the subject. Of course, I do not require them to use all the nouns and phrases, but simply those that will convey the ideas they wish to express. Printed slips of these subject lessons are given to each pupil, and by means of mucilage, they are

preserved in book form. At frequent intervals, they are called upon to write an exercise upon some paper in the collection. This exercise serves as a review lesson. Towards the close of the year, they are required to hand in a composition upon one of these subjects, written without the aid of the papers.

The following composition, prepared by one of my pupils, illustrates the use of these lesson papers:

SICKNESS.

Last year, Carrie McKenzie lost her appetite, and nothing tasted good. She felt weak. Miss Shugh saw that she looked pale and sick. She said to Carrie, while she was sitting on a chair in the sewing room: "What is the matter with you?" Then she said that she did not feel well. Then Miss Shugh told her to go up stairs, to get in the bed in the sick room. While she was going up stairs, suddenly she felt sick at the stomach and she vomited. Miss Shugh heard a noise on the stairs, and then she went and found Carrie had fallen on the stairs. Then she was very much frightened and carried her into the sick room. Miss Shugh thought that she had better send for a doctor. He came to the sick room and said to Carrie: "What is the matter with you?" She said that she had a bad headache, and she had a sore throat. The doctor told her to open her mouth. She did so, and then she put out her tongue. He examined it. He told Miss Shugh that her tongue was coated. He examined her throat, and said that her throat was inflamed. He did not tell Carrie about it, because she could not understand what he said. He felt her pulse. He said that she had a fever. He wrote a prescription for Carrie, and gave directions about the medicines. Miss Shugh said: "Yes, I will follow your directions, exactly." She gave a dose of medicine to Carrie three times a day. She mopped Carrie's throat. Miss Shugh told her that she would get well soon under the doctor's care. She suffered some with her throat, but she got better. She stayed in the sick room a few days.

The girls said: "Poor Carrie! Poor Carrie!" Carrie has been well since then. Miss Shugh told her that she must be careful not to get a cold. She is a bright little girl.

M. F. S.

PROF. F. W. BOOTH: How long had that pupil been in school?

MISS HARRIS: Five or six years. The pupils of my class have been in school from four to six years. I have used these lists during the past four years.

PROFESSOR BOOTH: Is this pupil deaf and dumb?

MISS HARRIS: She articulates; but she is a congenital mute. She belongs to the articulation class.

A MEMBER: I desire to ask if that composition is now as it was written by the pupil?

MISS HARRIS: With the exception of a few minor mistakes in the use of tense. It is almost exactly as she wrote it.

A MEMBER: Do you give all of the names on this list as one lesson?

MISS HARRIS: Occasionally I do. Sometimes I divide the lesson. I then require them to write on half of the lesson one day, and the next day take up the remaining half; the lesson of the third day would embrace the whole.

A MEMBER: To what pupils do you give that?

MISS HARRIS: To pupils who have been in school from four to six years.

A MEMBER: Will you explain just how you use these phrases?

MISS HARRIS: I spell out sentences embracing these phrases or write them on another slate.

A MEMBER: Before you give them the phrases contained in the list headed "Church," do they know what it means "to attend church?"

MISS HARRIS: Yes, many of them; but an explanation of every lesson is given before they are required to write upon it. I explain every phrase until I am sure they understand it.

A MEMBER: As that is arranged there, by carefully filling in all blank spaces, they could write a good composition.

MISS HARRIS: That is what I wish them to do; to use these expressions in connection with this particular subject. I fill in for them, and give many illustrations before I require them to write these compositions. I wish them to understand that by using these phrases and nouns, they can express themselves clearly upon the subject of attending church.

MR. A. S. CLARK: I would like to say that I think Miss Harris' mode of instruction an excellent idea; and that she has carried it out admirably. I think the arrangement is good; and I very much hope that all teachers of the deaf and dumb will at some time have the benefit of these. I hope they will be printed for our use; for I think we can all make use of them. I know that I shall be very glad of such help already prepared. It would save me an immense amount of work. I should be able to place them in the hands of my pupils just when I wanted to, and I am sure it would help them very much.

MR. ELY: It is the intention to put these in pamphlet form for distribution if there is any desire for them.

MR. WESTERVELT: These have all been printed from time to time.

MR. ELY: Yes, sir; we print lesson exercises of all kinds every day, whether they are important or for passing use. We print them for convenience.

MR. WESTERVELT: You have a paper published at your school. Would it not be a benefit to the profession, and to all of the institutions where papers are published, if such work as this done by Miss Harris were printed in such paper for the benefit of other institutions. If it is already set, all that is necessary is simply to keep the type standing until a paper is published; and it would be very valuable for other schools. We all look through the institution papers, and we are very glad to get hold of anything of this kind. I think there is altogether too little of it. We see here that Professor Ely has been doing for a long time in his school a great deal of most excellent work, which has been hidden there; and I hope that he will give it to us. We publish a paper at our institution, and I am glad to publish anything that we do; anything that is going on at our school; and if our institution papers did that more, it seems to me that they would be worth a great deal more to all institutions. I think that the pupils would receive great benefit from having this printed to carry around with them.

MR. McFARLAND: I like that suggestion. I think that we all of us would be glad to subscribe for every paper in the country for the sake of the information we would get, if we were sure of finding in each of them some department devoted especially to methods of teaching, or some similar matter. And in the course of time there would be gathered an immense amount of practical information from the men who are doing the work of devising methods and of testing them all of the time, which would be of exceedingly great help to all; and a large number of teachers and pupils would subscribe for the papers.

A MEMBER: For how many classes do you have papers of this class printed in your school?

MR. ELY: For four or five older classes. They are printed and distributed to the pupils. These lessons do not take the place of textbooks at all, but are simply exercises in language.

THE CHAIRMAN: The hour having expired, the language section has the floor.

MR. WEED: The next topic for consideration is not a poetic one, but

is one which all of us recognize as eminently practical—"The Correction of Mistakes."

I will first speak of the correction of mistakes by avoiding them. If that seems to be an Hibernianism, I am reminded of the boy who said that pins had saved a great many lives. When asked how, he replied: "By not swallowing them."

I have three suggestions under the head of "Avoidance." One is, a limited vocabulary, which we considered the other day, and which I will not repeat.

The second is "Past Tense" in the first year and possibly the second year, which has been considered, and which I will not repeat. This implies the non-use of synonyms, which has already been considered.

And the third and last point is: "To conceal from the eye, as much as possible, incorrect forms." For years it was my practice to take mistakes that I had found in compositions and write them out on a large slate in the presence of the class. An experienced teacher finally said to me: "Do you not see how every time you do that you impress that mistake upon the mind of the pupil?" I saw the point at once, and from that day have not done it. We should be as careful to conceal from the eye of the pupil, so far as we can, the sight of a mistake, as we should to keep a child from hearing an incorrect expression.

Those are the negative answers. Now for the positive. There are four methods of correcting mistakes:

First—By a teacher, without any aid on the part of the pupil, in the correction of his own mistakes. We all know what that is: to sit down by the side of the pupil, take a slate, full of mistakes, and write the correct forms. And what does it amount to? In nine cases out of ten the mistake is not noticed or remembered by the pupil, and the next time he writes a composition, the same mistake is repeated. I wish I could recall the months, and might almost say the years, that I have spent in this kind of work, that has been of no avail.

Second—To require the pupil to discover and correct his own mistakes. If a child brings to me a slate, with a composition on it, I first ask him: "Have you read that over yourself?" If he answers "No, sir," I tell him to go back to his seat, and read it, find out what mistakes he can, and correct them, and then bring it to me.

As an illustration of the effect of this, we have, in our school-room, a morning journal, covering one of these slates. Let me take the exercises of one boy, for one morning, one of the poorest scholars in the class, who had on his slate, for his morning journal, one hundred and twenty-nine words. In looking it over, I found that he had three mistakes. I could not get him to discover them, and yet I was satisfied that if he knew what and where they were, he could correct them, and on my pointing to the three, he did correct them. It is not my custom to indicate at once the mistake. I ask him to read the line in which the mistake occurs, and to find where he has made the mistake, either in the tense of a verb, in the termination of a noun, in the use of a preposition, or anything else.

I have spoken of thirteen pupils whom I have kept together during six years; and what I am saying applies to those thirteen, and not to the two or three others in the class. At another point I will give a result showing the benefit of this method of correcting mistakes.

When the three methods I have spoken of fail, I use the fourth method—the teacher correcting mistakes. And wherein does the

fourth differ from the first? Much every way. In the second and third the pupil's knowledge has been tested, his judgment exercised, and the exact measure of his ignorance has been determined, and he is prepared to apprehend his own difficulty. The effort of self correction has stimulated him, and he has a nicer discrimination than he would have had without it; and the correction is more fully fixed, and so less likely to recur.

But, after all, the question is unanswered, how shall the teacher correct mistakes? One portion of the answer is: By unclassified model sentences in which the pupil's mistakes are corrected, which I will now illustrate. I do not correct the mistake directly. I will, for illustration, give three sentences which I have copied from slates, and then show the manner of correcting them.

It may be very ungracious in me to tell tales out of school, and to cast any reflection upon our Principal; but I am not responsible for this sentence. Dr. Gallaudet had entertained our pupils very much with a lecture on his travels in Europe. Mr. Crouter had explained by signs what Dr. Gallaudet had said. The next morning one of the boys wrote: "Mr. Crouter *interfered* while Dr. Gallaudet was speaking." The mistake there is, of course, the word "interfered." I do not correct that sentence, but I do make a minute of the word "interfered" in my private memorandum book; and as he intended to write "interpreted" I also make an entry of that.

Example No. 2 was as follows: One of the boys wrote "Elizabeth was able to send to sea twenty thousand fighting men on a board." What he should have said was "on board of."

The boy who has made these mistakes has not been one of the thirteen who have had the advantage of a uniform course during the last six years. In fact, he has been in school three years longer than those thirteen, and has more words and phrases than any other boy in the class.

Another boy who has been unfortunate has given us this; and if Mr. Crouter is at all offended by the statement that he interfered while Dr. Gallaudet was speaking, he may derive what satisfaction he can from the positive assurance that "Mr. Crouter ennobles by principality in this institution."

Another example: "When Cleveland became President of the United States, he sent missionaries to foreign countries. The Rev. Mr. Pendleton, who President Cleveland appointed missionary, was sent to Germany." I write down the word "missionary" on my private list without the knowledge of the pupil. I also write in my private list the word "minister." Now, I have here the words of which I have made a minute: "interfered," "interpreted," "board of," "missionary," and "minister." At some time, perhaps the next day, when I have leisure, I compose sentences in which I shall use these words correctly. I will read a few sentences in which I have used these words correctly. I want to correct the word "interfered," and have the distinction made between "interfered" and "interpreted," so I compose the sentences: "Zeigler, the Prefect, *interfered* when two boys were fighting." "Mr. Crouter *interpreted* when Dr. Gallaudet was speaking." "When Dr. W. started for Europe, his father bid him good-by *on board of* the ship." "Queen Elizabeth sent twenty thousand soldiers to sea *on board of* vessels of war."

"Paul called himself a *minister* of Jesus Christ. He was a *mission-*

ary, and preached the Gospel in the synagogues of Thessalonica and B——."

"Hon. George H. Pendleton was appointed *Minister* of the United States Government to Germany, where Bayard Taylor died when he was a United States *Minister* there."

I copied these on my large slate in the presence of the class, and they read it over. I do not require them to commit to memory, but, as a matter of fact, they do. And, when they have become familiar with these forms, I have each boy copy the exercises in a blank book, which is kept for the purpose. Next week, some time, when they are not anticipating it at all, I give those sentences by signs, and they write them out from my signs. I then say, "Turn to page fifty, and compare what you have just written with what you copied into your book last week." And if there is any difference between their book and their slate, they indicate it, and show it to me. It is possible that they have written the sentence correctly, and, if so, I tell them. If they have made a mistake I then tell them to write it as it is in their book. A month hence I repeat this same exercise of giving those, sentence by sentence, and have them write them on their slates, and compare them again, at a time when they are not expecting it.

Now, as to the results of this process. They are two: one is, almost entire freedom from these mistakes. I do not say entire freedom. But, taking a class of thirteen, and supposing that these sentences number twenty, we would have two hundred and sixty sentences; and supposing those sentences have an average of twenty words each, we then have fifty-two hundred words; and I think I may safely say that, at the end of six months after that exercise was given, of the fifty-two hundred words there would not be an average of three mistakes to the pupil.

Second result: The eye is trained to discover mistakes. Let me give one or two illustrations of this point. A boy coming directly from the table one morning, wrote the following on his slate, and brought it to me, in relation to a text he had heard that morning: "'He was despised and rejected of me,' etc.; we know that the prophet, Isaiah, lived many years before Christ was born. Jesus is meant by 'He' in the text. Then, how could Isaiah write the word 'was' in the text, when Jesus was not yet born? I think it should be 'will be,' instead of 'was.'"

At another time, a boy, studying a Sabbath school lesson, says, " 'James, the son of Alphaeus,' should be 'a son,' because James had a brother, John; he was not the only son." Within five minutes another boy, not knowing what the first boy had done, brought me the same criticism.

And here is another that I little thought I should have occasion to read at this point upon this coast, when last winter it was under consideration. I showed a boy this sentence, and I wrote it just as it was printed: "Kernville, California, is a town of forty houses and but one inhabitant, who saw the mining camp at its rise, its glory, and its fall. His only neighbors are those over the hill, in the cemetery." Without any hint from me, the boy wrote the comma after the word "houses," and omitted it after the word "inhabitant," of course altering the entire sentence, and making it read: "Kernville, California, is a town of forty houses, and but one inhabitant who saw the mining camp at its rise, its glory, and its fall," etc. He was not quite so for-

tunate in another instance, and as his teacher I am not responsible for the sentiment as he punctuated it. It was this: "Woman without her man, is a savage." I told him to read it over, and he, in a moment, put the comma after the word "woman," and after the word "her."

There is another class of exercises that we shall not have time to consider in full, but which is of very great interest and profit to pupils who have been under instruction for three or four years. It requires them to think. I will simply read one of the exercises and some of their remarks about it.

Without any notice, I will put a sentence of this kind on the slate: "One dark night, when the new full moon was shining, but no stars could be seen, a deaf and dumb boy, with an unloaded gun, walking alone in the woods, heard a bird singing, which he shot, and gave it to his companion."

They do not know, when they commence to read it, but what it is all right. They soon discover, and then it is the business of each boy to write out any inconsistency he can find, and they are required to remember them. They say: "This sentence is not correct, because, first, if the new moon was shining, it was not a full moon; second, the night cannot be dark while the moon was shining; third, the stars always shine when the moon is shining; fourth, he could not hear the bird singing, because he was deaf; fifth, the boy could not shoot the bird when his gun was unloaded." One boy writes, "If he shot the bird, he could not give it to anybody, because he was alone in the woods." Another boy says, "He was not alone in the woods, but he was with his companion, to whom he gave the bird."

There are other exercises of this kind that I have found it an interesting exercise for them, to make them think. For instance: "Wismer carried an empty barrel full of apples, with one hand on his head, and the other in his pocket." They will give six or eight reasons why that could not be.

Another example: "H. and K. wrote on the same slate. H. wrote on slate No. 21, and K. on No. 22. They began to write at the same time. H. began at nine o'clock, and K. at ten o'clock. They each wrote one hour and finished at the same time."

"A blind man could not see, because he lost his spectacles. He looked for them, but could not find them. Then he put them on his nose and read three pages of a book, without turning a leaf."

But the time for the discussion of questions pertaining to the primary and intermediate department is exhausted, and I must yield to other departments of equal importance. [Applause.]

THE CHAIRMAN: The hour for the Natural Science Section having arrived, Mr. F. D. Clark, of Arkansas, will conduct the exercises.

MR. CLARK: I had taken up the subject of botany, but since I have been upon this examination I have had put into my hands a paper by Miss Cornelia M. Ely, prepared while she was a teacher at Rochester, I think. I was asked to condense that paper, but it is so very good that I am very unwilling to leave any of it out that I have time to read. It treats of the natural history of all those sciences that we usually call the "ologies," in common speech.

It is as follows:

CLASSES IN NATURAL HISTORY, IN A SCHOOL FOR THE DEAF.

"What's it good for?" said one boy, somewhat disdainfully, when told that the class would begin the study of natural history. "Shall we study natural history next fall?" said the same boy, eagerly, at the end of that term. "I hope so. I like it better than any other study." This boy was one who, before taking up the study, had been less observant, less fond of thinking and of asking *why*, than most of the others. He became one of the most indefatigable searchers after specimens, and after information concerning them. The *whys* with which he continually came to the teacher were often well nigh staggering.

The acquisition of English is of the first importance to our pupils; and whatever the subject studied, this thought must always be kept in view. And in the language exercises which we give, we must place the information gained second to the acquisition of idiomatic English. We do not forget this first aim when we take up the study of natural history. We only say that these lessons open the most lively way that we know of accomplishing what we seek. Before learning to use language, there must be a *desire* to use it. The child must have thoughts to express, must be eager to express them. What are the best ways to awaken the child mind? "If they would only think!" What shall we do to make them ask questions? But to learn to ask questions, they must first *observe* something which interests them; and this will be that which they can see, or can *see* and *feel*, or in some other way *know* a little about. We must proceed from the known to the unknown, always. Here we find the first value of the study of natural history for our pupils. It is an excellent training and developing study, beginning with young children, and lays a solid foundation for knowledge by teaching to observe closely. It is object teaching, and the objects are all about us, and of endless variety. "Nothing is more natural than natural history," and even the little child, with wide open eyes, will make wonderful discoveries. Yes, *with wide open eyes*, for though so many of the wonders are always near us, we may go through all our days and know not that they *are* wonders, unless we are awakened to look closely and *see*. This study stimulates that curiosity which all children have in some degree, gives it food and satisfaction, and leads it in the right way. That child of three years, who seized the cat, pinched it all over (not maliciously, but curiously), and briefly said "*Bones!*" in a tone of discovery, was learning to observe, and had made a discovery in natural history. The little pupil who, having had a lesson that morning about honey, came running from her play, pulling open the flower she was bringing meanwhile, and eagerly asking, "Where *is* the honey?" was learning to ask questions and beginning to find lessons in the great book of nature. The study of natural history inspires and satisfies a desire for independent work. The child's mind is awakened to look and to wonder, then to question and to investigate. He is fascinated; for the more he learns, the more he finds to learn and the better able he is to learn; and the pleasure of finding out for himself gives zest to his work, while he forgets to even *call* it *work*. Being led a little way, he goes still further by himself, finding new wonders without help; and no one doubts that what we labor for we better appreciate than that which comes to us without effort of

own. That this study is desirable and important for our pupils, has been proven satisfactorily to me. In all the variety of ways which we have for teaching language, always striving to make the study interesting and our pupils enthusiastic in learning, there are certain difficulties with which we often have to contend, viz.: To induce the pupil, not merely to memorize, but to *think*; not simply to take unquestioningly all that is given him, but to *seek* for himself; not always to be ready to acquiesce in *our* opinion, but sometimes to *tell* his own. Nowhere can we find more interesting nor as "*live*" topics of conversation and various language exercises as in this study. The ways employed in teaching it are of great value in teaching language. If the pupil *thinks*, he will not only *take*, but will be interested to find out for himself, and *finding* out, he will have opinions to tell. He will *want* to talk, for he has continually something new and interesting, and he will never try harder to express his thoughts, nor be more glad to be helped to a correct expression of them, than during these lessons. He will be enthusiastic, and enthusiasm is a great help. No books are needed, and this is a point in favor of our pupils, who, in these conversational lessons, or familiar talks and object teaching, gain the use of idiomatic English which their text-books do not furnish, while often puzzling them greatly. But after this, the study inspires a desire to read for the express purpose of gaining information such as few studies awaken. The teacher studies with the pupils, using, and teaching them to use, books of reference, and must never be afraid to say, "I don't know; I will look it up." For to teach in this way demands study on the part of the teacher, and there is no stopping place. The pupils will be continually searching and telling what they find out, and will *ask* whenever they do not know, and the teacher will be often confronted with questions as to the *how*, *why*, *where*, and *what*, which cannot always be answered "on the spot." In every way the pupils are encouraged to *look* and to find out for themselves, and are told only so much as will enable them sufficiently to do this. To see some of these enthusiastic young naturalists almost dragging the pond for specimens, while others are busily poring over books to find out about the butterflies they have just caught, or the crayfish, or the bird which "looked somewhat like a goldfinch," while another is seen to triumphantly deposit in the small aquarium a little fish (sought and obtained by no small effort) with the remark, "I think it is a pike; I'll find out," is very gratifying to the teacher, if somewhat amusing to the uninitiated. Or, if plant life is taking our attention, to discover, as you walk through the yard, *here*, a boy carefully examining the bark of a certain tree, there, another boy explaining to a third the way in which the leaf buds are protected through the winter, while a fourth pupil is bending over a tiny plantlet whose two seed leaves have just opened, and a fifth is on the way to plant something new in our box of "seedlings" beside the corn (which has already been pulled up three times, and its state and manner of growth commented upon)—all of this is also gratifying.

In taking up the study of natural history, in any of its branches, the classification best adapted to our needs is that of Miss Coe, of the American Kindergarten. This is very simple, having been arranged with special reference to children. This classification is given in full in the American Kindergarten Magazine, Vols. II, III, and IV. It is learned by the pupil almost unconsciously, as he is never given a *name* of any division, class, or species, until observation and talk

have shown him something for which he needs a name, when he takes it at once gladly, because it expresses his thoughts, and he does not consider whether it is long or short.

Permit me to give an outline of my plan of work, and of just what is done during one recitation hour in the class-room, first with an advanced class and then with beginning classes.

Here is a class of pupils who have been in school six years, having a large vocabulary, and using English fairly, who, of course, must have language exercise aside from their special studies. One of these hours for language study we devote to natural history. Last year the class began the study in learning something about the common vertebrate animals. This year because the pupils have asked it earnestly, they have been allowed to study something about invertebrates, beginning with insects. Specimens were in this class so plentiful and easy to secure that enthusiasm soon became unbounded. (In fact, when the annual picnic was talked of a certain place was especially recommended by many of these pupils because there were many insects there—hardly a recommendation for the average pleasure seeker in rural scenes.) A lesson to be committed to memory is never given, nor any set lesson from a book. The recitation hour of one day is devoted to examination of specimens, to draw out the thoughts and information of the pupils on the subject in hand, and to increase their desire to gain more; and to a short familiar talk by the teacher, who is careful to tell only what the pupil cannot find out for himself, and to put into concise and correct form what has already been expressed, more or less clearly, by the pupils. During the talk questions without limit are allowable. Directions are then given for reading from books of reference upon the special object chosen for study. Sometimes this examination and general conversation fully occupy the hour, so that the teacher's talk is omitted, in which case it is given the next day. For an example of the exercise, take a first lesson on insects (which would not be given twice in precisely the same manner to two different classes). Knowing that such is to be the lesson for this morning, and wanting to begin, the pupils come in, some bearing mysterious looking boxes, others rolls of paper in which are hidden some precious specimen, others carefully hiding in their hands something in which they evidently feel much interest. What a collection! a housefly, several varieties of butterflies, three different moths, a grasshopper, several six-legged creatures, as yet nameless to us beyond their general name of insect, etc. The teacher sits down with the class, and the conversation begins, perhaps in *this* way: "What have you found out?" Somebody says, "Every one of these insects has six legs, the moth the same as the fly and the bee." We all look and prove it to ourselves. The antennæ are discovered, and the name asked, then "What are they for?" say several pupils, and others "*I* think for smelling," "*I* think for feeling," "*I* watched the fly, and *I* think they are for hearing," etc. "How do they breathe?" says some one, and we talk about that, examining a May beetle in which the spiracles are easily seen. Then the eyes are talked about, then a leading question brings up the topic of their early life. Some one thinks they are first little flies, and grow and grow until they are just like the mother. Some one else immediately explains that he has seen the eggs of a certain moth, so they must come from eggs, and so we go on until the mystery of the three changes in the life of an insect has been explained, and with every new discovery there is a

rise in the tide of enthusiasm. Many differences which will later classify these insects more particularly are noted and talked of—as that the moths have long tongues, the beetles strong jaws, etc. When we have spent as much time as we profitably can in this way, the teacher may give a little talk, something like this (using the substance of the conversation and carefully adding what is needed): We have here a number of insects. They look very differently, do they not? We see that they are all alike in some things. All insects have six legs and two antennæ. They have two or four wings—never any other number. Their bodies are of three parts (giving the names of the parts). All insects change three times in life (giving a clear and simple description of the transformation assisted by the cocoons in our collection and the caterpillar provided for the occasion). They have neither lungs nor gills, but breathe through tiny air-tubes which run through their bodies, even through the antennæ and the wings. They generally have compound eyes (explain this clearly). A few insects have simple eyes, and a few have *both* simple and compound eyes. Though they have no bones they have muscles (and we pause to talk about what enables them to use their wings, to walk, etc.). Then the teacher goes on with a talk about the destructiveness of insects in the larval state, etc., but careful not to particularize, as the pupils will *find out* for themselves in the study of such specimens as they will choose, which is better than being told. Directions are then given for using the books of reference, certain ones being assigned to particular pupils with special passages marked for reading. The work of the class now is to take the subject-matter of the talk, their own previous knowledge and the information gained by examination; to add to these by reading, and then to write a summary which is brought to the teacher for correction. Each pupil is provided with a note book. When the summaries have been corrected they are copied into the note books for preservation. Each pupil feels a great interest in his note book, for it is emphatically his own, and he appreciates the labor expended on that which it contains. The day after the talk, the papers having been corrected, they are returned to the pupils. If a misstatement has been made it is read before the class and settled there, and the writer, not the teacher, must correct. A certain part of one paper is sometimes taken before the class for correction in composition. One pupil may be called upon to tell us anything which he has discovered since our yesterday's lesson (and be sure more than one will have something to say), and the class is dismissed. Very frequent reviews are given and in a variety of ways. Sometimes a list of general suggestions is written on the board, and all the pupils answer these upon paper, their answers being corrected by the teacher and the papers returned next day. Sometimes one pupil writes the classification upon the board, while another writes the meaning of the terms used, some of the others write about certain specimens, and still others classify these specimens. At another time the teacher asks the questions and the class answer by spelling or orally. Frequently verses from the Bible relating to insects are repeated, and little poems and stories told. Often these are copied into the note books with the original articles.

Compositions, reviews, exercises, etc., showing actual work of pupils were presented, but for lack of time were not read.

MR. CLARK: I will ask Professor Weston Jenkins to tell us how he *has been teaching botany* in his institution during the last year.

and it came out quite clean, which surprised them. I explained that to them, and then I took some cotton and put it into the filter, poured some more dirty water through that, and they saw that it came out clean. They were very much surprised. Then I explained that. And I said, "If you did not have any of these things, what would you do?" One of the boys said, "Use a handkerchief," and the boy put the handkerchief in, and it cleaned the water; showing that sometimes, if they were in a tight place they would have to make use of their ingenuity. That is one of the first things to be learned in chemistry. And this gives an idea of how I start in chemistry.

Then, after they had learned how to clean different things I asked them, "Is that water pure?" They did not know what I meant, and I explained it by taking a little water and putting a little salt in it, and asking them to drink it. They did not like it. Then I filtered it, and then they said it would be all right; but when it passed through it tasted the same. I asked them if it was pure, and they said: "No; there is salt in it." I asked them, "How are you going to get rid of the salt?" They didn't know. So I told them to put it into a glass retort or kettle—I always begin with home objects—so I took an ordinary teakettle and put that salt water in, and put it on the stove in the kitchen, and boiled it, caught some steam in an ordinary goblet, and got about two teaspoonfuls of water. They tasted that water, and it tasted no more salt. Then I showed them the scientific instrument called a retort, and a condenser, and showed them how to distil liquids. Then we get just one step higher, and they find out how to purify liquids.

I begin at the very bottom and work up, and after I get to a certain point it is fair sailing afterwards. But if you do not begin with these simple things correctly you cannot do it.

I asked a boy to put a cork in a bottle, and he said it was too large; that he could not do it. I told him he must, and he went to work and cut it the wrong way, and spoiled the cork. I had to show him how to cut that cork—that he must use a file and sand-paper. All of these points that I give you as illustrations are used, not only for the benefit of the knowledge conveyed, but for the training they get. I believe I have taught for five years what I have told you this morning. Then I begin with oxygen. This class have had a very good idea of physics, and understand what attraction, cohesion, and adhesion mean.

I do not believe, at all, in text-books in chemistry for children. Everything should be taught to them by object lessons. I believe they should have no text-books whatever. We should make their text-books. I take some chloride of potash and ask them what that is. They do not know. I ask them if it is a mineral or a liquid. They reply "It is a hard substance; I guess it is a mineral." I ask them to put it into a retort, and they do, and they look into the retort, and there is something black left there; it is changed. So it has overcome its cohesion. Then I ask them what it is, and they do not know, and I explain to them. They have had all of these objects described, everything that they use has been described to them, and they know the name of it, and they must know the name of it, because I make them do the experiments. I make them find out what is the result. A good deal of glassware is broken, but it is worth it, because in manual manipulation, deaf mutes, I think, as a general rule, are *clumsy with their hands*. I will not allow them to handle my own

microscope, but all of the delicate brass instruments I make them handle. I take up the compound of hydrogen and oxygen, water, and then I ask them what they do with water, and what it is used for, and how they get water pure, and so forth. Then I take up the compound of oxygen and nitrogen, considering nothing that is outside of everyday life. That is the way I begin chemistry. [Applause.]

MR. FRANK, of California: I desire to add something to what Mr. Clark has been explaining, in the study of natural history. I have here, in envelopes, sets of colored pictures, "Prang's Natural History Series for Schools and Families." I think there are a dozen in a package, showing the different classes of birds and animals, and with each one of these sets is a large picture of one of the species, to hang upon the wall. These are in little pasteboard holders, for convenient use in the class-room. They are designed to be given to the pupils to handle and examine, showing the nature and peculiarities of each class of the species.

MR. CLARK: I will say a few words about how I think botany ought to be taught. I should begin the study of botany with a young class by putting into their hands a certain number of seeds and bulbs, and telling them to plant them, giving them quite a number, so that every day, possibly, we could dig some of them up to see the changes that had occurred in those seeds, and draw their attention, perhaps, to the fact that some seeds begin this change very much sooner than others. Then, as those plants grow, I should call their attention then and there to the difference between monocotyledonous and dicotyledonous plants. That word is a pretty long word; but if you begin with them by building it up from its derivation, they will get hold of it. And I rather think deaf mutes like long words. I have frequently had them stop me to spell out a word of thirty or forty letters, and then make the sign for it.

MR. WESTERVELT: How can they explain it without a sign for it?

MR. CLARK: I would show them the thing itself right there, and then perhaps I might hit on some other sign for it, to save time in the class-room. From the very first, I would start with these pupils, by developing in their minds an idea of classification. We have it, more or less, but the deaf child does not. He looks upon things as units. You tell him, "That is an oak tree," and it is a long time before he realizes that there is another oak tree over there also, even though it is of the very same species. And when you get a different species, it confuses him. I have heard deaf mutes say, "This tree is not like that tree; the leaves are different in size. You say they are both oak trees. I cannot understand it." We must, from the very start, get them to classify. And I should follow pretty nearly the present accepted classification in botany. All you have got to do is to give them the names for those things.

Then, next, at the proper time of the year, I should bring flowers, for the classification in botany depends very largely upon the efflorescence of flowers. I should bring this, particularly, to their notice. I would teach them the difference between the stamens, the stigma, the style, the ovary, and all the different parts of a flower, and show them how these things change their forms; that while this flower has a style and stigma, that is very different from this other flower, still there is a general family likeness, so that a person who has examined a few will never, under any circumstances, confuse the style with the stigma, or the ovary of the flower.

Then, when you have taught them that, you have taught them the first step in the analysis of the flowers. Then in the very first flowers, draw their attention to the fact that in botanizing, they should keep away from garden flowers, mostly. A child, in its own attempts at botanizing, will pick up one of our garden flowers, where the stamens and style have all been changed to petals, and they are greatly confused by it. In the domestication of, or what we call "improving" flowers, changes are caused which are very puzzling to the young botanist. In studying botany for myself, before I went to college, I was hopelessly confused, from the fact that I went out into the garden and picked one of the double flowers that gardeners think so much more beautiful than our other flowers, and I could not see anything that the book said ought to be there. With that one hint, you can get along very soon to a point where the class of deaf mutes will recognize, not the species, perhaps, but the genus, of all our more common wild flowers.

Next to this I should take the ovary, in its different shapes, on which the next step in the analysis of flowers very largely depends. This it is much more important to teach than the difference between monopetalous and polypetalous flowers. They will see that just as soon as it is pointed out to them. And after this I have found Wood's Analytical Tables useful, and have used them with the sixth year class without any particular difficulty.

Having once got the boy or girl so that they see they can go out into the fields and pick any flower, and come back to their book and find out exactly what other people call that flower, you will be surprised to see the enjoyment they will take in it.

Professor Gray himself, perhaps our most noted botanist in this country, says that a person who has analyzed three hundred flowers independently is entitled to the name of botanist. It is not very much of a work to do this, after you have got through with the preliminaries. Take my high class boys, and they would do it in a year. Having a class started in that way they will never give it up.

MR. NOYES: What standing do your pupils have before you introduce botany?

MR. CLARK: I never teach it under six years; but I think I could teach it to a class beginning their fourth year. I never did teach a young class but one year in my life; since then I have always worked above the fifth or sixth year.

MR. NOYES: Do you recommend the use of some text-books?

MR. CLARK: There are several, but I should not like to recommend any particular one. I never use a text-book myself. The teacher, of course, ought to be familiar with the subject, and with those I have helped to some extent I have always found that they took Wood's. The successful use of Gray's Tables depends upon a knowledge of the peculiarities of the seeds very much, and Wood's do not so much. The peculiarities of the seed seem to be very confusing to young people, and they do not often have the seed when they get the flower; they have to wait, or make a microscopic examination, and it is often very troublesome to get at.

MR. NOYES: I am very happy to say that this is a very proper subject, in my view, to come before us. I think it is not the practice of many schools for the deaf to take up the subject of botany. When I was a boy, in the academy, under William H. Wells, the author of *Wells' Grammar*, he desired me to study botany. I objected seriously,

and told him I thought that would be very well for little girls who wanted to study flowers and paint pictures, and so forth, but for a man that was going to be a business man, I did not think it was the proper thing. He urged me, very strongly, to join the class, and said that after a given time if I was still of the same mind, he would excuse me from the study. I accepted his proposition, and commenced it, and I have ever since been very grateful to him for urging me to take up botany, against my wish. I was quite stubborn about it. In my first trip to California, there is nothing that has interested me more than to look out of the car windows to watch the trees, with their different forms, different shaped leaves, and different character of bark, and the color of flowers, and to remark—so far as I could determine it, what the several trees and plants were. It has been, from year to year, a source of perpetual joy to me. And I know that those children who use their eyes as the deaf do would derive great benefit from a short period of such study. I do not think it is best to protract it. I think we have been accustomed, heretofore, to giving more time to the study of geography than properly belongs to it. The course and location of every little river is a matter of small account. If you have an idea of the general system of streams, mountains, and leading points of a country, that is about all that ordinary men need. And a portion of the time that is usually given to the study of the capitals and cities and towns, and the peculiar productions of a State or portions of a State, is a matter that can be studied up at some other time. Instead of giving so much time to geography, give a portion of it to botany, and open up some of this richness, this vastness, and this great variety that is to be found in the study of botany.

MR. WESTERVELT: We have used Gray's "How Plants Grow," very satisfactorily, for our text-book, though of course we have relied upon the teacher as the text-book for botany. And the work that the children have done out of school is more important than the study of the text-book, although, of course, both are necessary. We find that Gray's text-book is simple, easily understood, and very satisfactory.

MR. WESTON JENKINS: That book gives a classification which is only a skeleton. I think that what makes the study of botany interesting is, the uses of the plants, how they grow, and what they are good for after they have grown, and that text-book does not give it.

MR. NOYES: Dr. Hooker's "Book of Nature" is a very excellent one, and the language is excellent for our ordinary deaf mutes.

THE CHAIRMAN: The following question I take from the question box: "What is the best method of conducting examinations?" I will call upon Mr. Crouter to reply to that question.

MR. CROUTER: It is difficult to say which is the best method. I think our methods are pretty good ones, and I will give them in detail. The questions for examination are all prepared by myself. I do it after consulting with the teachers as to the ground that their pupils have been over. They do not give me questions, or sets of questions, to ask the pupils in examination at all. I prepare the questions, endeavoring to find out in an independent way, the amount of knowledge that the pupils have of the work that they have been over. I do this in language, in arithmetic, and in all branches of study. I try to ask questions in a way that will show just how far the pupils have been grounded in the work that they have been over. It is a very easy matter to make an examination a mere showing of memory. The pupils may go over a certain amount of arithmetic or geography, and

them a certain credit for style and for the general manner in which they have done their work, taking their other mistakes out.

MISS WRIGHT: If you have a pupil that is very proficient in arithmetic and to whom it is almost impossible to teach language, and you come to fractions, and you give him examples and he performs the operation correctly and gives the analysis so that you are satisfied that he understands the arithmetic of the example but does not use perfect English, what would you take off for that? When he is perfect in everything except a deaf muteism in the language?

MR. CROUTER: We give a certain credit for arithmetic, and then whatever errors of language they make, maybe ten or twenty, they are deducted from their marks in arithmetic. The pupils understand that and it makes them more careful. Before we adopted this plan there was a great carelessness in the use of language in the examinations in geography and other studies, and hence this marking in language in every branch.

MR. NOYES: Do you prepare all the questions?

MR. CROUTER: Yes, sir. The teacher who conducts the examination does the marking, but no teacher examines his or her own class, and no teacher examines a class of the same standing as his or her class.

MR. NOYES: What is the object of these examinations?

MR. CROUTER: To encourage the pupils, for one thing, and we grade our classes by them to a large extent.

MR. A. PRATT, of Ohio: Instead of having one person to examine the papers and mark each class, it might be well to have the teacher of the class and two others, and in this way a more correct and just marking might be secured.

MR. ELY: In our school each class is examined by a committee of three, the Principal being one. The teacher of the class has nothing to do with it, except to indicate how far the class has gone during the year or half year under review. In our examinations in history and geography we do not discount for defects in language, provided the statement is full and accurate. Any inaccuracies of statement are deducted, and the misspelling of proper names is also deducted, but beyond that there is no account taken of the language, provided the statement is accurate and full.

MR. PRATT: We all have a class of pupils in our schools who are unable to go over the ground allotted to any grade. What do you do with that class of pupils? Do you let them go on with the higher grade?

MR. CROUTER: No, sir; we keep them in the grade where they ought to be, regardless of the time they have been at school and regardless of examination or anything else. Our higher classes are composed of pupils who ought to be in them and no others. In my experience it is impossible to secure perfect grading. You may start out in the beginning of the year with a class well graded, and before you are even at work three months you will find that you ought to regrade. We cannot spend all our time in regrading and we do it twice a year.

Do you find any difficulty in advancing those pupils, in moving them to the lower classes from being too full?

MR. CROUTER: No serious difficulty. Our classes average about

CHIRMAN: The next question from the box is, "Will some

one explain how to teach the time of day?" I will call upon Miss Wright.

MISS PHEBE WRIGHT: I can give my method. I generally try to have a clock that the children can handle. I think that deaf mutes like to handle things. Then I put upon the board a diagram of a clock, and write the figures of the clock. I take the minutes and make them the same as on the clock, and write over that "Minutes," and take the space of an hour, and write over that "Hours;" so they can see that there is a short hand and a long hand, and that the short hand indicates hours and the long hand minutes. I like to have a clock that goes, in my school-room, but I do not generally have one. I begin with twelve o'clock, and teach them that when the two hands come together, that is twelve o'clock; and I have every one write what time it is—"Twelve o'clock." I keep at that for a little while, until they understand it. Then, from there I move it to five minutes after twelve—moving the large hand, and the small hand a very little, showing that that does move. And I keep on in this way until I get to half-past. I go over that several times before I take the half-past. Then I write upon this diagram, as the hand goes around, "after" or "past"—using only one of those words, generally "past." Then, on the other side of the diagram I write the word "to," so that when the large hand comes round it is after the time, and they see it there. I keep drilling in that way for weeks. Then I rub out the diagram, and take a clock; or, if I have my watch where they can all see it, I stop it suddenly and ask them what time it is; and one pupil reads the time; and if he mistakes, I give the watch to another boy, and he reads the time; and if they all make a mistake, I read it myself. But I find very little trouble in that way. In the course of three or four months the majority of my class learn to read the time correctly; and I have them write sentences on the board in which the time is expressed. I put the clock at twenty minutes after one, and ask a boy what time it is, and make him count with his fingers "twenty." At first I do not make them say anything between five and ten minutes, but after awhile I have them give the exact number of minutes.

MR. CROUTER: I think every school-room ought to have a clock, and a good large one. But I have found it convenient, in teaching this, to use one of the little cards used in offices, saying "Will return at." They have hands upon them, and you can move them to any time of day. They are very useful in teaching the time of day, and just as soon as they learn the use of it, I refer them to the clock.

MR. CONNER: I have found it convenient to use a toy watch for the same purpose. I think it is also well to teach railroad time—8:30, 8:40, and so forth—so that they can understand it, taking it from railroad time-tables, that the hour is first stated and then the minutes.

MISS SUE ELLIS: I think there is a good opportunity right there to bring in a little language. A great many of my pupils write it as "8½," using the fraction. Then I say to them, "You have made a mistake; you ought not to use the figures '8½,' but you should say 'It is half-past eight.'" I find that has been of great use, and I have had a good deal of trouble and hard work in breaking them of that habit.

PROFESSOR MOSES: In teaching young children, I begin with "twelve o'clock," and then teach them hours, not considering the minutes at all, so that they can readily recognize the hours. Then I teach them the difference between "A. M." and "P. M.," and then begin with the minutes. I take the quarters and then the half, and then the minute

"5," "10," "15," "20," and so on. But I think you can obviate the trouble of the confusion of the short and the long hand, by simply indicating the difference until they can readily tell the exact hour of the day. Then make the distinction between "A. M." and "P. M.," and then take the fraction. I think you should teach them but one thing at a time. Otherwise they get confused.

THE CHAIRMAN: The next question is: "How to break up the habit of talking among the pupils in school, and how best to control hard cases—suppose the teacher a lady—and how punish great offenses." I will call upon Miss Dutch to respond.

MISS DUTCH: I think that it depends altogether upon the age of the class. There are a great many different ways, and I could not say which is the best way, but can give you my method. I think the great secret is to keep them interested and busy. Of course there are some that will leave their work and talk. In my own class I have a programme upon my slate for each day's work. I say, "First we will do such a thing; then, "second," and so on. "When you get through if you have no slate or anything to work on, or anything to do, pick up something and read it, and after awhile I will ask you to tell me what you have read." In that way some of them have been helped a great deal, and do not have time for talking.

Sometimes, though, I have had pupils who would leave their slates and books, and talk anyway. I have used various methods; have studied the dispositions of such children, a good deal, and I have sometimes stopped everything I was doing, called the boy up who was talking, and had him stand in front of the others, and have all of the children stop and look at him while I made him talk until he got sick of it. When he would stop, I would say, "No, keep on, you want to talk, and now we will only attend to one thing at a time, and you talk, and we will pay attention to you." I have sometimes kept them from their play and stood them in a corner and put them to do some disagreeable tasks. And then we have our reports, and we can shame some of them by giving low marks, but with others that has no effect. I have many times come to a point where I thought I would like some information on how to control hard cases, myself. But I believe the best way I have found is, when you have unusually hard cases, such as we all sometimes have, to deprive them of some pleasure they are fond of. Last year I had one or two boys who belonged to a base ball club, and who were very fine players and very necessary to the club. They were to have a match game upon a certain Saturday, and I know of two boys that didn't go to that match game. I found that worked very well.

Then another thing that we used very effectually, for awhile, certainly, was when our new gymnasium was opened, they were all very eager to go into it, and those who were disobedient, or who had committed any offense in school, were reported, and kept from the gymnasium.

That had a good effect. I once had a boy in my school who would make faces. I would call him up and have him make some faces for our amusement.

MR. GOODALL, of California: I would like to give my experience with one boy whom I practiced on for nearly two years before I could keep him still, and when I found out how to stop it, I did it in about five minutes. I had scolded him, marked him low, reported him to the Principal, and he was kept from going anywhere on Saturdays,

and still his Irish wit and fun would come out. For instance, one day Professor Wilkinson asked how many boys there were in that building, and he immediately replied, "Seventy-five and three quarters." The Professor asked him how could there be three quarters of a boy, and he replied, "There is a boy with a leg off." He would trouble me beyond all expression. I do not allow any talking whatever in my class. But although he did not disobey me in that way, he could make everybody else laugh with some movement or some wink, or by some means. At last I stopped short with him; I disregarded him entirely, only I didn't allow him to talk. I left him for two days without calling upon him for any lesson, and without looking at him. He attempted to talk to me, but I could not see him. He finally wrote me, all of which I disregarded until I had accomplished my purpose. Finally he came to me while I was at the slate, and asked me why I would not answer him. I told him that I was here to instruct and to help good boys; that I had nothing to do with bad boys. After an hour or two he piteously asked me to help him with some example. I commenced by being pretty stern with him—answering him shortly—until the time arrived when I told him that I was not offended with him; that I desired to see his improvement as much as that of any boy in the class, and would devote my time to him as readily as to any one when he treated me as the others treated me; hereafter if he desired to get on in school he should behave himself, and that every time he offended that he should lose one day in school; that for that one day I would leave him entirely. And I kept that up, and I never have had to ignore him but one day since, and that was about seven months ago, and he has been one of the best boys in my class since. [Applause.]

THE CHAIRMAN: The next question in the question box is one addressed to Professor Booth: "Do you use analysis for problems for a full understanding of the combinations of symbols given?"

MR. BOOTH: Yes, sir; to be sure that the problems are understood. But we must take a course of years before they fully understand the symbols; the figures or operation of the figures, as representing processes with numbers. We use language that is only a little more difficult than they themselves are able to write, and they make progress by their necessities.

The great danger in teaching the forms of analysis is that they learn them merely as an order of words—mechanically. They write the analysis to-day simply because their teacher did it yesterday. They memorize the analysis. We should avoid that. I should say that before giving these forms of analysis wait until the seventh, eighth, or ninth year. My experience this past year with a six-year class, with my system of instruction in arithmetic, in using these forms of analysis, has been quite satisfactory. I did not write the form of analysis upon the board for them to learn fully, but I simply performed the example before them, and, in signs, suggested what I wanted them to express in language. I would say, "If a horse," or "If this apple is worth two cents," and so forth; and in that way I tried to give them an idea of the subjunctive of condition, the subjunctive "if." Then I say, "Suppose one person," and so forth, and they go on and analyze it, taking my supposition, "If one apple is worth two cents, five apples must be worth five times as much," and so forth, and go clear through to the conclusion "therefore," and so forth. I give that in signs, and they had very little difficulty in get-

ting it. The next day I gave them another problem, and asked them to analyze it in the same way they did the day before, and some of them did it. The next day again nearly all of them did it.

So I say that they have very little difficulty in using these forms of expression when they have the idea as they may have it by my method of teaching arithmetic. If they get the idea clearly in mind of numbers and the relations of numbers which the language is intended to express, they have very little difficulty in using the language to express those ideas which they have clearly in mind. First give them the ideas, and then the language. Do not give them the language first, and let them think that from the language they may get the ideas. It is contrary to nature.

THE CHAIRMAN: The next question is: "How to Teach Relationship; that is, in reference to its use in letter writing; how avoid such mistakes as the following: A letter beginning 'My dear sister,' and signed 'Your affectionate son?'" This is referred to Professor Westervelt.

MR. WESTERVELT: I should begin when the child first comes to school to teach him relationship. It is easy to teach very small children the relations they hold to the father and the mother; that the boy is a son and the girl a daughter. Where they make such mistakes in a letter I know of no better way to correct them than simply to point them out to them, and ask them if they are correct. They usually know, because they have been told oftentimes. Then let them make the corrections themselves; or, if they are not able to correct them, let the other members of the class correct them. It is true that such mistakes are common; but they are only the result of carelessness. Hardly any peculiar method is necessary for correcting those errors, any more than any others.

MR. PRATT: I believe one of the causes of these mistakes in letter writing is that what is everybody's business is nobody's business; that it is not made, as it should be, the special work of some one year to teach the various forms. I have been surprised in the last three years to see how many letters come to the Matron of our institution commencing "My dear Helen," and how many were sent to the Superintendent giving his first name, as though they were writing to their brother or some member of the family, or some of their dearest friends. I think it should be made a special exercise during the year, of some one class.

MR. CROUTER: We make letter writing an exercise through almost all of the years of the whole course.

MR. ELY: The next question is: "I once asked of a certain teacher which was, in his judgment, more satisfactory, to teach the present or the past tense; and he said 'The past,' but, when I asked him why, he could not tell. He further said, 'I should try to see for myself.' So I ask of you two questions: First—How long have you been teaching the present tense, exclusively, and how long the past tense, exclusively? Second—In your judgment, which have you found to be more successful, and how or why?" This is referred to Mr. W. A. Caldwell, of Indiana.

MR. CALDWELL: I think this subject has already been discussed. The past tense seems to me to be the most natural of any tense. But since my first work in teaching, I have never had a young class, myself, and I hardly know which to advocate. For my own part, I

prefer the past tense. If we ever have any tense in our minds I think it must be the past tense, in thinking of any action. We do not think of it as present, but it has already past. But this is merely a matter of opinion.

Adjourned to half-past seven o'clock P. M.

AFTERNOON SESSION.

President Gillett, in the chair, called the meeting to order.

Prayer was offered by Rev. Mr. Masters, of San Francisco.

The Secretary read the minutes of the last meeting, which were approved.

THE CHAIRMAN: The next paper will be "The True Combined System of Instruction," by Mr. Crouter, of Philadelphia.

THE TRUE COMBINED SYSTEM OF INSTRUCTION.

The relative merits of the oral, manual, and combined methods of instruction, as pursued in American institutions for the deaf, have been so frequently and fully discussed that their further consideration may possibly appear to many superfluous; but, in view of the fact that these discussions have, as yet, led to no conclusions that have been accepted by the adherents of the different methods, I trust that a brief exposition of the defects of certain of them, and of the advantages of a system which I am led by experience to believe possesses the merits of all of them, with the smallest possible proportion of the defects of any, may be of interest to the members of this convention.

In the "American Annals of the Deaf and Dumb," of January, 1882, Professor Fay, of the National Deaf Mute College, says, after briefly describing the oral method of instruction: "The combined method is not so easy to define, as the term is applied to several distinct methods, such as: (1) the free use of signs and articulation with the same pupils and by the same instructors, throughout the course of instruction; (2) the general instruction of all the pupils by means of the manual method, with the special training of part of them in articulation and lip reading, as an accomplishment; (3) the instruction of some pupils by the manual method and others by the oral method, in the same institution; (4) although this is rather a combined system, the employment of the manual method and oral method in separate schools and under the same general management, pupils being placed in one establishment or the other, as seems best in each individual case."

In this concise yet comprehensive statement, Professor Fay sets forth very clearly the salient features of the four distinct methods of instructing the deaf that are severally and collectively included in the term, "The American or Combined Method."

Beyond pointing out their advantages and commending them to the serious attention of the members of the convention, and especially of those who are at the head of large schools, where a system of classification according to the natural powers of deaf children can be most fully and profitably carried out, I shall have but little to say concerning the last two of the methods enumerated; but the first and second are so fraught with what, after a somewhat lengthy personal experi-

ence, I have come to believe is hurtful to the best interests of the deaf, that I propose to state, as briefly as the nature of the subject will allow, my objections to them, and to urge their discontinuance as a part of the American system of instruction.

The first of these methods seeks, by the free use of both signs and articulation, by the same teachers, in the same classes, to instruct all deaf children in spoken and written language and other branches of study. It is to this and to the succeeding method that reference is most commonly made when the term "combined method" is used. A more appropriate name for it would be, in my opinion, the mixed method, for there can certainly be no combination between two elements of a system of instruction which not only do not work together for a common object, but positively antagonize each other. A teacher working under this method not only tries to teach, by the aid of signs, the ordinary branches of a common school education, which, with deaf children, is a sufficiently difficult task when performed under the most favorable circumstances, but, also, attempts to impart, as a separate branch of study, a knowledge of articulation and lip reading. Here we have two entirely distinct and independent objects to be attained, each of which ordinarily demands the whole time and attention of an earnest instructor for its accomplishment. He then must be twice a man who, unaided, can bring about their satisfactory fulfillment. Mark that the purpose is not to give instruction orally in the ordinary branches of study (this is done by manual means), but to teach articulation and lip reading in addition to them. Time thus devoted to articulation and speech reading, as an accomplishment, is time taken from the other branches; it is insufficient for the attainment of the object in view, and, as a result, the child usually leaves school with imperfect powers of articulation which he soon loses from a disinclination to use them (which disinclination arises principally from his own knowledge of his imperfections), and, frequently, an inadequate knowledge of other and more essential branches of study.

Oral and manual instruction cannot be successfully imparted in the same class. The methods are diametrically opposed to each other, and when pursued thus closely together they expend their powers in counteracting the influence for good that each possesses. Under this form, the semi-mute, to whom the oral method is obviously best adapted, falls gradually into habits of manual communication with resulting detriment to his speech and speech reading, while, to the congenital mute, the time thus devoted to articulation is ordinarily time wasted. Another defect of this method lies in the fact that it brings together in the school-room two greatly dissimilar classes of pupils. Very often there is a greater dissimilarity between the semi-mute and the congenital mute than between the semi-mute and the hearing child. A well known English writer has said that a child learns more in the first seven years of its existence than in all the rest of its life. While this assertion may be somewhat extravagant, it is certainly true that the development of a child's mind is proportionately much more rapid during the first four or five years of its life than afterwards, and the child who, during these years, has been in full possession of all his normal faculties, will have a better developed mind and possess greater mental powers than one who has been deaf from birth. This being true, different methods of instruction are required for different classes of pupils, if each is to

make the fullest possible progress. For congenital mutes, minute explanations and constant repetitions are necessary which to semi-mutes are generally superfluous and irksome; the former are slow of comprehension, and have constantly to retrace their steps; the latter are quick, and anxious and able to press forward rapidly. Thus it happens, when the two are brought together in the same school-room to receive the same instruction, the semi-mute cannot make as rapid progress as he would if unimpeded by those who cannot keep step with him, while the true mute, in struggling to keep up with his more favored classmate, suffers not only from the disadvantage of unequal mental development, but the added one of imperfect training, the result of a defective system of classification and improper methods of instruction. The semi-mute chafes at the delay, and gradually loses interest in his studies, while the congenital mute becomes discouraged, and finally sinks into a state of indifference, from which he is with difficulty aroused.

As for the teacher, he is but human, and cannot serve two masters in the school-room any more effectually than he can out of it. His desire to make a good record as an instructor tempts him to devote his time to the most progressive portion of his class, to the neglect of those most worthy of his best efforts. The mischief that results is not the fault of the teacher, but that of the system under which he is compelled to labor; and we think we but state the truth when we assert that, to the conscientious teacher, this method is the source of constant harassment and painful misgiving concerning the best welfare of his pupils. Professor Storrs, in an able article in the "American Annals," says: "As a teacher, then, having regard only for the best work of my class and to the maximum of advantage to the most needy, and I may add, the most interesting portion, I confess I am always unfeignedly sorry to see any semi-mute, however bright, claiming any portion of my time and effort. I know that such a pupil does not need, in any special degree, that peculiar instruction which it is my privilege to attempt to give to such as do need it." There are, I believe, few teachers who do not echo these sentiments of Professor Storrs. They appreciate more fully than any one the unequal contest the two classes are waging, and yet, though their sympathies may go out to their struggling deaf-mutes, they find themselves compelled, by the necessities of their position, to neglect the weaker for the stronger, the striplings in knowledge for their more robust competitors.

The second form of the combined method, as defined by Professor Fay, is that wherein the general instruction of all the pupils is carried on by means of the manual method, with the special training in separate classes, of a part of them, usually the semi-mutes only, in articulation and lip reading as an accomplishment. This appears to be the most popular method of instruction in America to-day. It is also, in my opinion, the most mischievous, for it is open to all the objections urged against the previous method, and several additional ones peculiar to itself. Under it the special accomplishment of articulation and speech reading is gained, if gained at all, at the expense of attainments far more important and practical to the pupils to whom it is generally confined, and the general progress of the rest of the class is very seriously interrupted. The training semi-mutes receive in this way very often fails to give them even a moderate dex-

terity in speech and speech reading. A comparison of the attainments of pupils in schools where their whole training has been oral with those of similar standing whose training has been of the intermittent character of the so called combined method, conclusively demonstrates to me the superiority of the former in articulation and speech reading. This statement may seem extravagant and unwarranted by facts, but, after a careful and somewhat extended examination of the results accomplished under pure oral training, and combined training, I am bound to admit that with some exceptions, pupils trained under the former method excel in these two respects.

And this, in the nature of things, cannot be otherwise. Instructors in oral schools are just as earnest, enthusiastic, painstaking, and capable as are the teachers of articulation in sign schools; their pupils are naturally just as bright and receptive, and why should they not accomplish more in this direction, working four or more hours a day, than we, under the combined method, working a half, or perhaps one hour, a day. To expect any other result appears to me absurd. Besides, the constant means of communication in the former case being by the voice, the child comes to look upon it as the natural and only right means of communication; while, in the combined school, the pupils being constantly surrounded by those who use signs, and receiving a great part of their own instruction through the medium of the same language, they soon acquire a dislike for oral instruction, and practice their powers of oral communication to a very limited degree only. They look upon it as an imposition, an irksome task from which their schoolmates are excused, and very often are found in no happy frame of mind when the hour for articulation work arrives. This, of course, makes the work of the teacher all the more severe; he has to work against the grain, which is no pleasant addition to the other difficulties of his position. Indeed, considering all the disadvantages under which they labor, it is surprising that teachers of articulation working under this method accomplish as much as they do.

While this oral work is going on in the articulation-room, the teacher from whose class the pupils have been taken is indulging in thoughts not in the highest degree complimentary to an arrangement that daily breaks up his work, and is often perplexed beyond measure how best to fill in the time with so many of his pupils absent. He cannot go on with his regular course of instruction, and, consequently, a large portion of his class is obliged to suffer for the doubtful advantage afforded to a few of its members.

In short, it may be said of this form of instruction that the pupils dislike it; the teachers dislike it; it fails very largely to accomplish what it attempts; and it is a decided hindrance to the general progress of both manual and oral work.

If the experience of others confirms the truth of this picture, it is certainly time that some remedy were provided.

To me, the remedy is a very simple and effective one, and, I am glad to say, is embodied in the last two forms noted in Professor Fay's definition of the combined method.

Under the first of these two forms, oral instruction and manual instruction are given in the same institution, but in separate classes, the pupils being taught by one means or the other, as in the judgment of the Principal may appear best—manual instruction being given to

those who should be manually taught, and oral instruction to those who may most profitably be taught in that way. Under this arrangement, the evils attendant upon the two first mentioned forms largely, if not wholly, disappear, and each child enjoys that form of instruction best suited to his condition.

In the institution which I have the honor to represent before this convention, this form of separate oral instruction has been pursued in two of the classes in the main school, for three years, with gratifying success. In one of them, the youngest, the pupils may be regarded as being congenitally deaf; for, if they were not born deaf, they lost their hearing so early in life that no trace of speech remained when they entered the school; the other consists mostly of semi-mutes and two bright congenitals. Although no attempt has been made to restrict these children in the use of signs out of the class-room, their progress in articulation, speech reading, language, and arithmetic has been highly satisfactory. Indeed, I am inclined to the opinion (the future, however, may prove that in this I am wrong) that the use of signs on the grounds, in the play-rooms, and in the chapel has been an advantage to them in the way of mental development. The progress of *these pupils* is to me a matter of deep interest; if it continues uninterruptedly to the end of the course, it seems to me the possibility of prosecuting successful oral work in a manual school will be proven beyond a doubt.

There is an objection (I am willing to concede a serious, though by no means a fatal objection) to this form of instruction, arising from the fact that the pupils who are thus being instructed orally are constantly subjected to the seductive influences of signs. To many who favor the pure oral method, this would appear an insurmountable objection, but with the experience I have had upon the subject, I do not so regard it, and maintain that, if not equal to the last, it is at least vastly superior to the first two mentioned forms. Under it, the congenital mute is not subjected to the discouragements that arise from constant competition with those who possess superior natural advantages, and the semi-mute is not retarded by those who are less quick of comprehension than himself; the teacher is not tempted to favor one pupil at the expense of another, and is not subjected to daily interruptions of his work; and the progress of the semi-mute in articulation and lip reading is much more rapid and permanent.

But the last form mentioned by Professor Fay affords, in my opinion, the best possible system for the instruction of the deaf. It provides instruction in separate schools, under the same general management, for both classes; those who can best be instructed manually being so instructed, and those who can best be instructed orally receiving oral instruction. The advantages of a school so organized are worthy of serious consideration. The question whether the child should be instructed orally or manually presents no disturbing difficulties since, being left to the impartial and unprejudiced judgment of the head of the school, it is solved solely with a view to the best interests of the pupil, and without any reference whatever to the discordant claims of rival methods.

It cannot be denied that, organized as most of our schools are at present, many children are compelled, owing to the selfish interests of the advocates of the methods under which they are being instructed, to undergo a course of training wholly unsuited to their condition. *On the one hand* are the adherents of the pure oral method, who say:

Teach all orally—any deaf child that can be taught at all, can be taught to speak. And on the other hand are those equally extreme in their views who maintain that all should be instructed by the manual method, with articulation and lip reading thrown in as an accomplishment; that to attempt more is a waste of time, and must result in great loss to the pupil in the way of mental development. And in attempting to prove the correctness of their theories, both classes of instructors do great injustice to a large proportion of the children confided to their care.

Surely the time has come when all may yield somewhat in their extreme views, and unite upon a surer, truer, and more practical system of instruction than the one they now advocate; one which, while giving the greatest freedom as to method, will secure that kind of instruction best suited to each child. This system, which at the head of this paper has been called the True Combined System of Instruction, includes, under one management, manual instruction, pure and unadulterated, for all who may most profitably be so taught, and oral instruction, pure and unadulterated, for all who can most effectually be educated by that method. It discards all attempts to provide accomplishments of any kind, and confines itself to what appears wisest, best, and most practicable for each individual case.

For all practical purposes, and in order to secure immunity from error in the choice of methods, I would divide the deaf into three classes, the congenitally deaf, the semi-deaf, and the semi-mute. With the first I would include those born deaf, and those who lose their hearing from accidental causes very early in life, say within the age of three or four years. These, for the most part, I would instruct manually. The semi-mute and the semi-deaf, and such of the congenitally deaf as appear particularly bright and quick to learn, I would instruct orally. A few months' or a year's trial will enable the Principal or Superintendent to decide whether a mistake has been made in any individual case, and if so, a change should be quickly effected. But having definitely decided on the method best adapted to each pupil, let that form be adhered to. If the child is to learn to speak, let speech be its means of communication, and not signs or writing or spelling; if, on the other hand, speech is believed to be impracticable, dismiss all attempts to teach orally, and resort fully and heartily to manual methods.

After a trial for several years of the second method of instruction as defined by Professor Fay, the managers of the Pennsylvania institution, deeming the results obtained by it unsatisfactory as regards articulation and speech reading, determined to make a trial of the pure oral method, under the same management but in a building separate from the main institution. Accordingly, an oral school was organized at a convenient distance from the parent school, and placed in charge of a principal teacher and several assistants. The school passed through the usual vicissitudes of all such experiments. It had its friends and its foes. The former stoutly maintained that all deaf children could be taught orally, while the latter contended that very few true mutes could be benefited by that method, and that results would never warrant the outlay of time and money necessary to attain them. Happily, neither side was able to carry out its extreme views, and with the lapse of time more moderate and conservative counsels began to prevail; for, while the results were not such as its most ardent friends had expected, still, enough had been done to

fully warrant the continuance of the school. It was, therefore, reorganized and brought more into harmony with the parent institution, thereby securing, as is believed, the greater efficiency of both. It is believed that a large percentage of our pupils, namely, the semi-mutes and the semi-deaf, and such of the congenitally deaf (few in number, probably) as are capable of receiving oral instruction, can and should be orally taught, and that all others, forming, to be sure, the majority of the pupils, should be taught by manual methods.

The objection so often urged against separate oral instruction, that of the increased expense, has not proven with us at all formidable. It has been found, by actual experiment, that the capita cost of maintaining a separate oral school under the same management is but slightly greater than that of the parent school. But, however this may be, when the importance of speech to a deaf person is considered, the slightly increased outlay incurred in providing it should have but little weight. When a deaf child is able to make itself understood by its voice, even though unable to read the lips, its affliction is very greatly diminished, and no one will deny that it is our duty to lighten the misfortune of deafness in every possible way.

We consider our departure no longer within the domain of experiment; it has become an accomplished fact. The two systems are working harmoniously, side by side, each contributing not a little to the success of the other, and separate oral and manual instruction will, in future, be a prominent feature of the system pursued in the Pennsylvania Institution for the Deaf and Dumb.

THE CHAIRMAN: The next paper is "The Combined System of Instruction," by Dr. I. L. Peet, of New York:

THE COMBINED SYSTEM OF EDUCATION, AS PRACTICED IN THE NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE DEAF AND DUMB.

Combination is the condition in which we find everything in nature. The elements are so seldom found in an uncombined state, that rarely can one of them be released except by effecting a new combination. Air, water, earth, soil, ores, rocks, present familiar instances of this chemical fact. Animal and vegetable life, rising a step or many steps higher, introducing the principle of the transmutation of inorganic into organic matter, exhibit yet more remarkable phenomena belonging to the domain of chemical affinity, while the great laws of heat, of pressure, of attraction, of repulsion, and of electrical action illustrate the influence which every particle of matter exercises upon every other particle, from the minute atoms which so far escape human observation, even though aided by the magnifying powers of the microscope, as to be recognizable only by the imagination, to those stellar worlds which, revolving about some central sun, form systems upon systems, which, in their turn, and observing due relations to each other, revolve in the immensity of space around some common center, which may be the throne of God.

It is in accordance with the general law thus manifested, of unity in complexity, that analysis, the resolution of a whole into its parts, and of greater parts into smaller parts, becomes so important to him who, by right of discovery or of full comprehension, would lead the minds of children and youth from those simple elements he has brought within their grasp, step by step, through that synthetic, reconstructive, inductive process which enables them to reach the

heights to which he would lead them, and, from every level gained, bring them back, by a process of deduction, to the elements from which they started, enlarging the area at each descent by increasing the number of details, and elevating it at each ascent. It may be compared to that method of drawing which, beginning with simple lines, unites them in a general outline, and then, proceeding to give the effects of light and shade, ends in giving a projection so perfect as to produce upon the retina of the eye the same impression as that produced by the object counterfeited; or to that method of printing which, at each impression, introduces a new color, until, as a result, we have a picture glowing with blended and harmonious tints; or to those methods of manufacture which require repeated application of different tools, one after the other, to produce, in the highest degree, the effect sought.

It is such a process that forms my ideal of what is called the combined system of educating the congenitally deaf; not a system which practices, in the same institution, methods differing so fundamentally that they ought, from the nature of things, to be separated from each other and used in separated schools, but a system which brings, for the benefit of each pupil, so far as is applicable to his case, every known method which has been found useful in giving him a knowledge of written and spoken language, and of those facts, ideas, processes, and principles which constitute what is called a good common school education.

What has been called the American system of deaf-mute instruction was based upon the methods of the Abbé Sicard, the disciple and successor of De L'Epee, which were introduced into this country by the illustrious Thomas Hopkins Gallaudet, LL.D., aided by that remarkable living deaf-mute exponent of Sicard's system, Laurent Clerc.

To Sicard are we indebted for the idea of grammatical analysis by means of symbols, which, starting from him and enlarged by Vaisse and Barnard at New York, has reached a fuller, more complete, and more practical stage under the labors of subsequent American instructors. To him, also, is due the first successful attempt to classify signs and to describe them upon paper.

His dictionary of signs gave a correct analysis of abstract terms, but made the system which he advocated difficult to carry out. He believed largely in the value of making signs in the order of words, and was, in a high degree, formal and didactic in his methods. But he was a man of genius, and, for a time, the highest authority on deaf mute education.

The early American instructors, however, following the lead of Bébien in France, early emancipated themselves from the trammels thrown about them by Sicard, and advocated largely the use of ideographic signs with which ideas were expressed in the natural pictorial order which uneducated deaf-mutes most easily understood, and giving, therefor, English equivalents in phrases and clauses.

Associated with this development was a printed course of instruction by Dr. H. P. Peet, then President of the New York institution.

Following him, but differing from him, came Jacobs, of Kentucky, who advocated Sicard's early ideas of signs in the order of words, and wrote a text-book to illustrate his theory.

All this while, the controversies of the day, on this side of the water, hinged entirely on the method of using signs.

The report of Hon. Horace Mann, Superintendent of Public Instruction in the State of Massachusetts, on his return from an extensive educational tour of Europe, in which he gave such glowing accounts of the extraordinary success alleged to have been attained in Germany in teaching the congenitally deaf to speak and to read on the lips—accounts which led many to believe that all differences between the congenitally hearing and the congenitally deaf had been removed by a wonderful system of instruction, made it necessary that the American institutions should investigate the matter from the standpoint of the expert, and, accordingly, in the year 1844, the American Asylum at Hartford and the Institution for the Instruction of the Deaf and Dumb in New York, sent, as delegates to visit the schools in Europe, the one, Lewis Weld, its Principal, and the other, Prof. George E. Day, a fine German scholar who had, for many years, been one of its corps of teachers. Professor Day, sixteen years later, visited Europe again, and examined the schools in Holland and the Netherlands.

The reports of these gentlemen, though absolutely independent of each other, concurred in the opinion, that, while there was no advantage whatever in the system of instruction that obtained in Germany, where it had been established by Heincke, the cotemporary of De L'Epee, so far as development of mind, extent of knowledge, and the acquisition of language were concerned, over the French system as modified and improved in America, but rather, a positive disadvantage, and, while appreciable success in articulation and lip reading were limited to the comparatively few, there were cases of semi-mute and semi-deaf pupils in every institution whose intercourse with society would be promoted if they should be taught articulation and reading on the lips. Accordingly, in both the asylum at Hartford and the institution in New York, a part of each day was set aside for training certain pupils in what was considered a desirable accomplishment—that of acquiring accurate speech and some ability to read the lips.

In 1851 my father, the late Dr. H. P. Peet, accompanied by myself and three deaf mutes, who were able to bear their own expenses and wished to avail themselves of this opportunity to travel, spent about six months in a tour of France, Italy, and Switzerland, the towns on the Rhine, Holland, Belgium, and Great Britain and Ireland, visiting all the institutions that came in his way. Dr. Peet's report contained a very full exhibit of the methods employed and the results obtained in these several institutions, and is to be regarded as a standard historical statement of the condition of deaf-mute instruction at that time in the countries visited.

The conclusions he reached did not lead him to alter the course of instruction pursued in the New York institution, as he was convinced that the American system had the prestige of superiority, both in its language of signs and in its method of overcoming the difficulties of language. Of the remarkable revolution in methods in Italy and France, which, within the last few years, has banished the use of signs from countries in which that language seemed almost indigenous, and the departure from the principles of De L'Epee, Sicard, and Pendola, had not then been given the slightest premonition.

In the year 1865, a devoted, intelligent, and highly cultivated lady, encouraged by Horace Mann and Dr. Samuel G. Howe, opened, at Chelmsford, Massachusetts, a school for teaching deaf-mutes on the

principles they had each recommended, namely, the non-use of signs and of the manual alphabet, and the restriction of the instruction of the deaf and dumb to the use of articulation and writing. The establishment, in 1867, of the Clarke institution, at Northampton, Massachusetts, which had been endowed by the will of the late John Clarke, brought Miss Rogers into a broader field of usefulness, and articulation and lip reading in this country were raised to a higher degree of prominence in the education of the deaf. A conference of Principals, held there in 1880, introduced to the notice of our profession a charming school, beautiful in situation, happy and restful in its management, fascinating in its arrangements. It was in term time, so that the process of instruction could be examined. The pupils appeared to advantage, and the faith of some in the manual system was weakened by the success possible to one that was its opposite.

In the year 1866 came from Vienna, in Austria, Bernard Engelsmann, for years a disciple and assistant of the distinguished Mr. Deutsch, and established a school in the City of New York in which articulation was made the means of communication and instruction. A society was formed for its maintenance, and eventually, in 1870, secured from the Legislature of New York a law granting to it, under the title of "The Institution for the Improved Instruction of Deaf Mutes," the same privileges that had heretofore been granted exclusively to the New York Institution for the Instruction of the Deaf and Dumb, viz.: the selection of pupils between the ages of six and twelve by the Supervisors of the counties, to be supported at the expense of the counties, and of youth over the age of twelve and under the age of twenty-five by the Superintendent of Public Instruction, whose education, at fixed pro rata, should be paid for quarterly on the warrant of the Comptroller. This was at first \$300 per annum, which is the highest limit established by the law, but of late years has been \$250.

Just before this law was passed, the Principal, Mr. Bernard Engelsmann, resigned his position and was immediately engaged by the New York institution. Two large rooms and an assistant teacher were assigned to him, and under his care were placed about forty pupils, some technically called semi-deaf, because they possessed a partial hearing, some technically called semi-mutes, because they had learned to speak before becoming deaf, and others because, in the previous instruction given in the institution, they had shown a peculiar quickness of eye and mind which had given them some ability to articulate and to read the lips. Singular to relate, Mr. F. A. Rising, one of the instructors in the old New York institution, who had paid but little attention to the subject of articulation, was elected Principal of the institution which Mr. Engelsmann had founded and left, and it was under his administration that the institution was admitted to State support. Mr. Rising was subsequently succeeded by Mr. D. Greenberger, an expert in teaching by articulation. Mr. Engelsmann remained with us four years, till September 1, 1873, and until the last three years a distinct department of articulation and lip reading has been maintained in the institution.

In the year 1880 we determined to have all the pupils in the separate primary department in the Mansion House at Washington Heights, and in the branch institution at Tarrytown, taught articulation and lip reading, and accordingly two teachers, Miss Anna B. Garrett and Miss Elizabeth Mitchell, were appointed for that special

purpose. This was the method pursued in some of the schools in Europe, especially in Holland and Belgium, which Dr. E. M. Gallaudet visited in 1868, in the course of a tour in Europe, in which he made a fresh comparison between the different methods pursued upon the Continent, and which, in his able and exhaustive report, he commended, under the name, then new, now adopted as distinctive in all the American institutions, of the combined system.

Of the fifty-three public schools in the United States mentioned in the January number of the "Annals" for 1886, the method of instruction of twenty-nine is described as combined, of ten is described as manual, of seven is described as oral, of three is described as oral and combined, of two is described as oral and manual, of one is described as combined and aural, and of one is not characterized.

Of the above, the only one known to me as having a combined system in one establishment, and a pure oral system in another establishment, from which the use of signs is entirely excluded, is the Pennsylvania institution, in Philadelphia, which is working out, for the benefit of the American schools, a most interesting problem.

In this convention, our obligations are due to each and every institution which has brought here something distinctive for the common good, and which, in the sense in which Dr. Gallaudet originally used the term, has given to the convention which unites in one body, in mutual respect and appreciation, all the instructors of the deaf on this continent, the broad catholic claim to be considered as an important phase of the combined system.

In the State of New York, there are now seven institutions, in which, on the first of December last, there were present, under instruction, one thousand two hundred and ninety-nine pupils, who, with the exception of three or four from other States, all received their maintenance from the treasuries of the State and counties. Of these seven institutions, the system of one is given as pure oral, of one as oral and combined, and of five as combined.

The system of the oldest and largest of these, that which I represent, differs in toto from any exclusive system, such, for instance, as rejects either the sign language used in its natural order, signs for individual words used in the English order, the manual alphabet, the use of speech, and of lip reading, aural development, the so called natural method of learning language, the grammatical presentation of the relation of words in sentences, or any of them. On the contrary, it seeks to combine the benefits to be derived from any or all of these in the case, not of selected pupils, but of each and every pupil.

Except in what we call our kindergarten department, the hours of instruction for each class are four daily. The first hour is devoted to the recitation of the lesson conned in the study hours out of school; the second hour, to exercises in the English language; the third hour, to arithmetic, and the fourth hour, to lip reading and its corollary articulation.

The desks are arranged on three sides of the room, so that the pupils may sit behind them, or in front of them—behind them when they are obliged to use pen and ink; in front of them, in seats arranged in the form of a semicircle or semiellipse, when they are to receive direct instruction from their teacher. The wall on the side of the room in front of them, on the teacher's side, like the wall in front of you as you sit here, is lined with large slates. In the recitation of the lesson during the first hour, the teacher gives to the class a question

with the manual alphabet. One of the pupils, designated by lot, goes to the teacher's slate and writes the question. If he omits a word or makes any mistake, another pupil advances and corrects it. The first pupil then gives a sign for each word in the question. He then gives the whole question in ideographic signs, such as the pupils are accustomed to use in conversation among themselves. He then proceeds to answer the question in writing, while the other pupils watch him narrowly to see if they can detect an error. When he has finished his answer and his errors have been corrected by one or more of his fellow-pupils, he gives the answer by signs in the same manner as he has given the question. He then, if he is able, repeats his answer by articulate speech. The teacher then takes the opportunity to elucidate the matter either in signs or in language, as may seem best under the circumstances. The next pupil in order writes, explains, and answers the next question in the same manner; and so on, till the lesson is concluded, a record being made of the success of each pupil.

In the exercises in language during the second hour, there is considerable variety within each week or month. Sometimes the pupil is required to translate a story from ideographic signs given by his teacher or by one of his classmates. Sometimes he analyzes a sentence by means of grammatical symbols, giving especial attention to the phrases and clauses; the teacher requiring several of the pupils to rewrite the same sentence by placing the adverbial phrases or clauses at different points, indicated by him. Sometimes the exercise consists of conversation, the teacher writing a different question to the pupils in turn, and requiring each to give a written answer in the presence of the class, or requiring each of them to propose to him a written question, which he answers in writing.

In arithmetic, the teacher explains by demonstration the principle to be applied. He then calls upon each of the pupils to perform an example of this principle in the presence of his fellows, and to be so explicit in his explanation of his work as to make the exercise one of benefit to the whole class. He then directs the pupils to take the textbook which he is following to their study-room and solve for themselves, as an out-of-school exercise, the problems therein given.

In the formal instruction in lip reading, each teacher uses a reader of different grade, according to the standing of the class: Monroe's First and Second Readers being first used, and afterwards the second, third, and fourth volumes of the series of readers known as Sargent's Part Two. This reader he retains in his own hands, the pupils not being permitted to have access to it. He begins the lesson by going rapidly through the phonic alphabet, which consists of the different consonant and vowel sounds which enter into the pronunciation of English words, and as he does so, each pupil gives the corresponding letter of the manual alphabet, modified so as to secure an exact correspondence, as follows:

p-b-m-f-v: t-d-n-l-r-s-z-th-th: sh-zh-tsh=ch-dgh=j, h; k-g-ng-ks and
gz=x-koo=qu-

ē, ī, ā, ě, ä; ōō, ōö, ō, ä, a, ŭ; ũ; üē, äöō, aē, ēöō.

The teacher then dictates, by speech, the words composing one of the sentences in the book, and at each articulation the pupils give, on the hand, the corresponding letter of the manual alphabet. When a

word has been once pronounced, the teacher repeats it again and again, each time with greater rapidity, till the eyes of the pupils are accustomed to the quick succession of articulations required in its enunciation.

One of the pupils then goes to the slate and writes the word in phonetic spelling. Each word in the sentence is thus given by the teacher and written by the pupils in succession, until the whole sentence appears upon the slate. The pupils are then required, in succession, to put the orthographic spelling under each word. They are enabled to do this by a few simple rules with regard to equivalents previously given them, but when they are unable to do this the word to be translated is passed over till the close of the exercise, when its true spelling is revealed by the context. When the rules already given are not sufficient for the transformation from the one kind of spelling to the other, the teacher takes the opportunity, at the end of the exercise, to give a new rule or to note an exception so that these may be available thereafter.

When the sentence has been fully and correctly written, it is translated into signs by one of the pupils, the phrases and clauses are noticed, and attention is called to idioms. The exercise thus becomes a valuable lesson in language as well as in lip reading. I will give an illustration, by writing a sentence first in the phonetic and afterward in the orthographic spelling, so as to give a clearer idea of the process detailed:

Ēōō ōōīl bē glād tōō lŭrn thăt hōō ěn ōōē rĕtshĕd Săk rā mĕnto,
 You will be glad to learn that when we reached Sacramento,
 ōōē ōōŭr mĕt bāē Mĭs-tŭr Ōōīl kĭnsŏn hōō grĕtĕd ũs ōōīth ěn-thōō
 we were met by Mr. Wilkinson who greeted us with enthu-
 zĭ āzm.
 siasm.

The arrangement of clauses may be thus illustrated. The adverbial clause, *When we reached Sacramento*, may be inserted in different places, so as to produce the following variations of the sentence, "When we reached Sacramento, we were met by Mr. Wilkinson:"

1. We, *when we reached Sacramento*, were met by Mr. Wilkinson.
2. We were, *when we reached Sacramento*, met by Mr. Wilkinson.
3. We were met, *when we reached Sacramento*, by Mr. Wilkinson.
4. We were met by Mr. Wilkinson, *when we reached Sacramento*.

It must be acknowledged that this process is very slow, but it is, also, very sure. The principle upon which it is founded is that speech is nothing but phonetic spelling, which can be demonstrated *pari passu* by means of the manual alphabet. All the pupils above the grade of idiocy are able to master it, and the exercise awakens every one of them to enthusiasm. The phonic alphabet is mastered, not by continual repetition, but by use in speech, and it is a remarkable fact that, after a fair ability to read the lips has been attained, many pupils of themselves begin to articulate, by placing their organs of speech in the positions daily given them by the teacher, and often follow him as he pronounces the words.

The progress in lip reading thus rendered certain in slow speech, becomes more and more rapid from day to day, so that less and less time is consumed by the exercise, and they are able to read words spoken with comparative quickness. Two little semi-mute boys in our primary department have reached a point where they can read on the lips almost everything that is said to them at the ordinary rate of speech, and when they hesitate at an unusual word, they never fail to catch it when repeated once in slow speech, and the same can be said of others of our semi-mute pupils, while the congenitally deaf are already approaching a point, where, with many of them, it will soon be possible, as it will eventually be with all, to make communications with the phonic instead of the manual alphabet.

The method of teaching lip reading by means of giving all the pupils such familiarity with the phonic alphabet, as to enable them to read words at sight, has been practiced in the New York institution since the fall of 1882, the syllabic method having obtained up to that time. But the present method of having the lesson given simultaneously throughout the school, and of making the teacher of the class, instead of a special teacher of articulation, directly responsible, has been adopted only during the last two years, while the plan of making the lesson in lip reading a lesson in language in connection with a graded course of reading, has been perfected only during the last ten months.

The results already gained are such as to promise absolute success in the future. Our semi-mute teachers are fast becoming expert in the teaching of lip reading.

They, as well as our congenitally deaf teachers, are, however, assisted during the lip reading hour by hearing young ladies of whom we have a number who are learning all phases of our combined system, with a view to qualify themselves to fill vacancies when they occur in our own or other institutions.

It will, I hope, be understood that we do not intend to discard a single one of the various important methods hitherto adopted, but, while retaining all we have gained in the past, press forward in the future, our motto being, "These ought ye to have done and not to leave the other undone," and we are not without hope that the compliment we pay the pure oral system may be eventually reciprocated so that the fusion that is going on in all elements of progress in this great country will eventuate in bringing all teachers of the deaf to acknowledge the advantage to be derived from the combined system.

THE CHAIRMAN: The next paper is "Comprehensive Education in its Philosophy and Practice," by Mr. Gilbert O. Fay, of Hartford, Connecticut.

COMPREHENSIVE EDUCATION IN ITS PHILOSOPHY AND PRACTICE.

In hearing education, teachers discuss topics before their pupils or require them to read up the same in text-books, and later to reproduce the remembered substance in language, written or oral, generally the latter. Facility of speech, an extensive diction, exists at the outset. A deaf child is not best taught by the same verbal process, destitute as he is, or nearly so, of both words and thoughts. Such a task is the Egyptian one of making bricks without straw. The wiser teacher, with true philosophy, will become for the time a gesticulating mute himself. The mute's pantomime he does not shun or seek

extirpate. He is thankful for its existence, and patiently learns to use it, that thereby he may lead the pupil up to the added understanding and use of words in their easiest visible form—the dactylic, or finger spelled. He becomes a child himself, even a mute, that thereby he may lead his pupils up to and into their kingdom of heaven—written and oral speech. The pupil, encouraged by the fellowship of his teacher, will work along this new line of language patiently, happily, hopefully, successfully. Not a single pupil will despair or fail. The script of the school-room and the type of the book will follow in close alliance. The fingers, in decimal system, will count and calculate; and their equivalents, numerical and verbal, will be committed to memory. Within a year, the pupil will write many a story with his stock of words, already amounting to five or six hundred. The same process, kept up, will conduct him subsequently through the various uses of the vocabulary of common life and the usual list of studies constituting the course. Printed language or script, previously written, will be the preferred medium of communication to the pupil in the school-room. Extempore pictures, pantomime, differing in no philosophic sense from the pictures of books, will be freely furnished in explanation of the verbal text. When neither print nor prepared script is accessible, dactylic language will be employed. But out of the school-room, in the tide of daily life, in its flood of events, great and small, in its business, its amusements, its necessities, its exigencies, verbal speech will yield precedence to the more rapid and more expressive language of signs. Spontaneous feeling will maintain itself against all precepts of teachers and their severest repressive discipline, be it sweeping or petty.

The child's first learning of language will be a process of simple imitation. Later, when ideas have increased and the reasoning faculties have measurably awakened, sentence analysis and rules of composition will be profitably introduced. No teacher, however, should forget that a wide vocabulary, scanty enough at the best, with simple syntax, very simple, is preferable to longer sentences of misused words. Much should be, may be, understandingly read that should not be at any time imitated. The wide understanding and flowing facility of teachers, and the analogy of composition by hearing pupils, often mislead the teacher of the deaf into a pace and range of work entirely beyond the assimilating capacity of his pupils. The right use of qualifiers and idioms is slowly, very slowly, acquired. Verbal language is incessantly lapsing. Haste will break up a growing style, really correct, into a chaos of shreds and patches.

For deaf children at this stage there is no adequate literature existing for the occupation of their leisure hours. So called children's books, though beautifully illustrated, are decidedly too difficult verbally for deaf-mutes. To some exceptional pupils, already referred to, the editorials of the daily press and the fictions of Dickens are acceptable. But the ordinary deaf-mute needs at first books and papers upon the commonest topics, written wholly in simple sentences of eight or ten words. Such a literature is indispensable as a substitute and equivalent for the colloquial speech of the hearing. The want of it is the occasion of many idle, or worse than idle, hours among the deaf.

Following the acquisition of verbal language in its simpler and clearly visible forms of finger spelling, writing, and print, the comprehensive teacher will also undertake, along the years, as a part of

the general course, and with daily drill, to give to his pupils a mastery of the vocal equivalents of the words which they already understand and freely use. The task is beset with extraordinary difficulties, and should not be pushed at one time to the weariness or disgust of the pupil. Not hearing his own voice or the voice of others, and only conscious of certain muscular action approved by his teacher, his difficulties are prodigious. Gains trifling to the hearing should be thankfully recognized and encouraged. Every deaf child can learn a few words. Many can learn to pronounce sentences fluently. With advancing education, pupils judiciously handled will have a growing ambition to add oral speech to written. Poor articulation, broken speech, is better than none. The ability to utter single words, to go no farther, adds substantial value to life. To make room for oral speech, the range of study in general knowledge and written language, already limited, need not, should not, be narrowed. Vocal training should be introduced into, or rather added to, the course of existing education in fair proportion; and it should occupy a part of the daily school time, presumably, of every pupil. A degree of proficiency in oral speech should be made a condition of graduation in the State institutions and in the National College. To secure this result, extension of time, if demanded, should be granted.

The deaf, out of school hours, should be encouraged to use dactylic and oral speech, not passing beyond the point of weariness. If they are likely to become proficient in oral speech, steady encouragement and its superior convenience will secure its permanent use. After they have acquired the correct use of dactylic speech, they should not be held permanently to its use. If unlikely to rise to the easy use of oral speech, they should not be checked in their inclination to think in pantomime. Its celerity, parallel in degree to oral speech, affords them, in thinking at least, a great relief from the tardy pace of finger spelling, be it ever so rapid and correct.

Errors of proportion have divided the educators of the deaf into schools of opinion, not exactly hostile, but certainly separate and narrow. The schools of France, for a century, and subsequently the schools of the United States, while theoretically favorable to the teaching of articulation, have demonstrated only and mainly, through long practice, the importance and possibilities of pantomime and the uses of the manual alphabet, supplemented by written speech. They have applied these instruments with great skill and energy, and have produced a remarkable body of silent scholars, easily superior in scholarship to anything that oralists have been able to produce. French and American schools, true to their traditions, have been backward, however, in taking up and applying, with equal skill and energy, the teaching of oral speech. Might not a fraction of their silent written scholarships have been well exchanged for a degree of oral skill? Such seems to be their own present conviction. We are now witnessing the introduction of the systematic teaching of articulation into all the prominent institutions of Europe and America. And the pursuance of this policy has exhibited the fact that the development of the faculties and the acquisition of verbal speech by pantomime, by finger spelling, and by books, are an excellent preliminary training, the full peer of all rival expedients, for teaching associated and subsequent oral speech itself. The pupil has something to say, and can be more easily taught to say it. The present

need of our historic schools is to expand their scope still more widely, so as to include and attach to themselves all that is valuable in oral schools. If a longer school period shall be found necessary for the best results, it should not, will not, be withheld.

Another school of opinion, represented by the schools of Germany, for a century, and by a few recently opened in the United States, ignores the pantomime of the deaf, and uses none. It omits the finger alphabet, and proposes to teach the deaf at the start, and with no intermediate step, oral speech itself, and by it all branches of desirable knowledge. Though opposed to the use of extempore sign pictures, it uses all printed pictures freely. It omits evidently and rejects such illustrations as the pupil is likely to imitate and to incorporate into signs of his own. It is communicating instruction with great and increasing skill, and to a proportion of pupils steadily enlarging. The partially deaf and those who have heard in early years succeed from the start. An additional number, some of them totally deaf from birth, succeed to a limited extent, practically useful. A large number do not acquire it sufficiently to be able to rely upon it, singularly evanescent, in after life. At school they habitually invent and illicitly use a gesture language for social relief, and feel more confidence in their pencil than in their voice. The time spent in oral teaching has crowded out some topics taught in the sign schools. The range of written scholarship, including English composition and the ability to read newspapers, is considerably lower. This deficiency is justified by those who are responsible for it by the compensating value of the oral speech, acquired or attempted.

These schools have yet to learn that, in omitting the use of pantomime and finger spelling, they ignore the uneducated mute's best friend. They take away a ladder, the only ladder known, by which all the deaf can easily rise. They require the mute, scorning all climbing steps and gradual approaches, to clear at one bound the chasm that separates the deaf from the hearing. They force the recruit at once upon frowning breastworks. They apply a method derived from the functions of the hearing mind, and not at all from the essential, the universal functions of the mind of the deaf. Attempting the best things for all the deaf by a method heroic, they succeed with a small number, less than half, and, holding no middle ground, substantially, culpably fail with a considerable number. The brilliancy of the operation is clouded by its frequently fatal issue.

These schools, excellent, ambitious, and ably officered, need, in behalf of many of their pupils, to incorporate into the early years of their course all that is valuable in the sign schools. The removal of intervening barriers will make the two jarring methods friends—astonished to remember that they ever differed. Pantomime and finger spelling, as jealously excluded now from oral schools as the "long keels of the Northmen," will prove a boon, a help, and not a hindrance to all their pupils. They will all easily rise, and rapidly, to the plane of written speech; and those capable of taking the higher step, the last, the crowning oral one, will not be the less able for having a broader elementary base.

To secure the best results in existing institutions, sign and oral, a degree of reorganization will be necessary, gradual or summary. It will involve in sign schools the adding of the teaching of articulation to the daily round of the duties of existing teachers, or the employment of additional articulation teachers. In oral schools it will

involve the added use of pantomime and the manual alphabet by existing teachers, or the employment of additional teachers who can use them. New institutions need not be embarrassed by servile imitation of institutions time honored simply. The line of progress is not necessarily a royal line, a dynasty. Errors may be transmitted, congenitally so. New institutions should have the enterprise and courage to select and to combine wisely, with at least one eye to the future. A great desideratum in the equipment of a school so enlarged is a collection of books, a library of them, composed in shortest words and in syntax extremely simple, with the syllabification and all silent letters clearly indicated.

It remains for our country, reverential and fearless, inventive and aspiring, and abounding in resources of money and of brain, to organize, to perfect, and to sustain, an eclectic, a combined, an American system of deaf-mute education—a system that shall be true to the nature of the deaf, and that, using all arts, shall conduct them gently, hopefully, happily, and within a reasonable time, up to the plane of oral speech. Some will talk in halting tones. Some will pause midway at written speech, and that in syntax poorly ordered. But all will, by graduated process, achieve results proportionate directly to their school time and to their receptive power.

THE CHAIRMAN: The subject is now before the convention for discussion.

MR. NOYES: I would like to ask a few questions in reference to this subject, which, perhaps, more particularly refer to Mr. Crouter's paper. I desire to ask Mr. Crouter if he, in receiving pupils into his institution, first introduced them into the oral department?

MR. CROUTER: No, sir.

MR. NOYES: How do you know who are suitable subjects for the oral classes?

MR. CROUTER: They are all received into the institution. There is but one institution, and they become pupils of it. Those who are semi-mute or semi-deaf are sent to the oral department. Then there are some bright deaf pupils come to us that I think possibly may be taught in that way, and they are also sent to the oral department at once. At least, we did that last year.

MR. NOYES: Are you always able, during the first week after their admission, to determine who are proper subjects for the oral classes?

MR. CROUTER: Not in cases of congenital mutes.

MR. NOYES: Did you ever discover, after years of trial in a sign class, that the pupil, almost of a sudden, developed an ability to speak?

MR. CROUTER: I presume there are such cases.

MR. NOYES: Can you suggest to this convention some method by which the Superintendent or Principal can be quite sure of determining those who are proper subjects for the oral classes? Suppose we have thirty pupils admitted at the opening of the term. Within the first ten days of that term, how can we be sure that we have obtained for the oral classes all those that ought to be in there?

MR. CROUTER: In the case of those who are congenitally deaf, there is but one way in which the matter could be finally decided, and that would be by giving them all oral instruction.

MR. NOYES: Your theory is that all should be put under an oral teacher, and be kept there?

MR. CROUTER: No, sir; I made no such statement.

MR. NOYES: That this hourly drill in articulation was worthless?

MR. CROUTER: Yes, sir; I think so. I think that the half-hour drill, in cases where deafness is congenital, is almost useless.

MR. NOYES: How can you determine?

MR. CROUTER: From the results of our past experience. Take a boy who comes in the institution for the first time, the only way in which the matter could be decided would be to try him with oral instruction.

MR. NOYES: That is your method, then—half oral and half manual instruction?

MR. CROUTER: No, sir. I should give him oral instruction, and have done with it. Not both oral and manual. I should put him into the class of oral instruction.

Last fall we received into our institution some sixty pupils, I think. There was a large oral class, composed wholly of congenital mutes, in the main institution, under the instruction of Miss Richards, who can give an account of her work. Those were all new pupils.

I will say further, that before selecting these pupils for Miss Richards, the best of those who were congenitally deaf were sent to the oral branch, and Miss Richards' class was made up of those who remained. There were two classes, of some twenty pupils, sent to the oral branch; first a class of semi-deaf and semi-mutes, and then a class of congenital mutes; the latter class consisting of those who were particularly bright, coming from intelligent families, young and more hopeful cases; they were sent down, and of those who remained some ten were selected and placed under Miss Richards' instruction. All of the rest, consisting of a number who were congenitally deaf, and too old to begin oral work, they were placed under a sign teacher alone.

MR. NOYES: I want the principle by which you make this selection, to determine who are proper subjects for sign classes.

MR. CROUTER: The ones that were placed under sign instruction, a class of sixteen pupils, were all pupils that were past twelve years of age, and I did not think it was advisable to place such children under oral instruction. It would be an experiment which I did not care to make.

MR. NOYES: My own theory has been that taking pupils and training them for half an hour a day, in a short time you can determine who are proper subjects for articulation, and who are not. But I have yet to meet the Superintendent or teacher who can take a glance at thirty green, uncultivated, and unsophisticated pupils, and can select, right off, those who belong to the sign class and those who belong to the oral class. I have had pupils who at the end of the second year, when I thought they were not competent for articulation, sometimes suddenly become subjects for the oral classes.

MR. CROUTER: I do not think there will be any question about the advisability of attempting to instruct orally the children born deaf mutes, who come to us at the age of sixteen. I think there would be no serious attempt made in our oral schools to instruct a boy or girl born deaf, who comes to school at sixteen. It would be a useless waste of time. There is but one way in which that question can be answered, and that would be, to give all children upon entering our institutions oral instructions; and then when you are satisfied that it is a failure give them sign instruction.

MR. NOYES: I suppose that all children when they enter our schools

ought to be sifted; and during that sifting we determine who ought to be put into the sign classes and who into the oral classes. And that can be done by simply introducing all of the children into the oral classes and giving them a test; and then, when dissecting these oral classes, determining who can be properly continued in oral work. And this is a question I would like to have come before us; whether it is the proper way, to introduce every child into the oral department first, and retain him there until we are satisfied. When I had charge of blind children in our school, we almost invariably held to the principle that all of the blind children should learn music. Some of our boys I verily believe could not grind an organ with any taste, and they had to give it up. They had no tune; and we took them from the department, sometimes after two or three years trial. In regard to deaf and dumb institutions, shall we put all of these children, whether five or twenty years old, into the oral department, and then simply sift out those who belong in the sign department, after we have had a fair and satisfactory trial? This is a question I would like very much to hear discussed.

DR. GALLAUDET: I have listened with great interest to the question just asked by Professor Noyes, of Minnesota, as I have also to the papers presented this afternoon. It seems to me that in the grand movement of deaf-mute education in America we have made history rapidly to-day. I do not remember to have read, nor to have heard in any convention or conference which it has been my privilege to attend, thoughts expressed which seemed to me to mean more in the interest of the widest and best teaching of the deaf, than those which have been presented to this convention this afternoon in the able papers which have been read. It is with no little pleasure, Mr. President, that I see strengthening indications of a certain harmony and spirit that is ready and willing to adopt what is good, and equally ready and willing to reject what is found to be less valuable. And I see, Mr. President, in the sentiments of these papers a prophecy, voiced by him whom hereafter I shall look upon in a sense as the prophet of deaf-mute instruction in this country, my friend Dr. Fay, of Hartford, who, with keen and far-looking ken has grasped what is to come in the future. And I congratulate him, while I equally congratulate my friend, Professor Crouter, on his presentation of practical work done in Philadelphia, and my old friend, Dr. Peet, on his philosophical presentation on the general subject of the combination which is to bring out in the future such grand results. I look to Dr. Fay as our prophet for the future. [Applause.] And, Mr. President, he has given voice to thoughts that have rested in my mind during these days that we have been together here, which I have not time to formulate, and which I should not have put in shape with the precision, strength, and vigor that he has been able to express them. But when he says that the day is coming when, in the oral schools, signs will be used, and the manual alphabet will be used, and there will be teachers, either those who now teach orally who will learn signs and the manual alphabet, or others who will come in to help them, I congratulate him on his prophetic vision, for it is a dream in which I have indulged, but which I have hardly dared to express. But, Mr. President, I will venture, now that my friend Dr. Fay has gone forward in the van, to follow him, and say that I believe that no teacher of the deaf, whether a teacher in an oral school or not,

is fully equipped for his or her work until he or she is proficient in the language of signs and in the use of the manual alphabet.

I am not expressing this idea on the spur of the moment, or wholly at the suggestion of Dr. Fay. For in the school at Washington, which forms a part of the Columbia Institution, which embraces the College and the School, we have a teacher of articulation who was for a number of years a teacher of the old or the sign method. And I have watched for six or seven years the work of this teacher, who has been devoting all of her time to the teaching of speech and lip reading to the deaf; and I am certain that on occasions—I may say almost without number—I have seen her take the hand of her pupils, or the tongue and lips of her pupils, and carry them lightly over difficulties in speech, because she knew how to reach them by signs. [Great applause.]

I am speaking from experience. I have seen results among the pupils of our Kendall Green School, with regard to which I have no disposition to indulge in that American weakness of boasting—I have seen pupils there attain results under the instruction of this teacher, who was an adept in the sign language and ready and nimble in the finger alphabet, that has astonished me. Up to the present time we are teaching articulation practically as an accomplishment. I mean to say that the pupils of our different classes have gone out of their classes for half an hour or more to the instruction of our articulation teacher. I have seen results obtained among our pupils, even among congenital mutes, which I venture to say, in all humility, will compare favorably with some of the results that would be called above the average in purely oral schools where the pupil has teaching all of the time.

I commend most earnestly to the serious consideration of those of our friends who are present here, the second of Dr. Fay's suggestions, that the teacher of the deaf, no matter what is his or her province, ought to know the language of signs. I will linger for a moment on this point, to give a reason or two why I make this recommendation. No one knows more certainly than the teachers of the oral schools themselves, that deaf children will use a language of signs. They will use it on occasion. They do resort to it; they do fall back upon it, no matter how much attempt is made to distract them from the use of language of signs. Therefore, it seems to me, for this reason if for no other, that the teachers in these schools should be adepts in the sign language; not merely able to use natural gestures and pantomime, to illustrate what is said in the school-room, but to know all of the language that their pupils know. And it is a fact, I believe, in many oral schools, that pupils go in and out and use a language which is, to a certain extent, not possessed by their parents or teachers. I have been told that they can successfully impose on their teachers, who know nothing of it.

I will take no longer time to discuss this point to urge oral teachers to learn the sign language. As great an oral teacher as Graham Bell has told me within a year that he wished he knew the sign language; and he has promised to come to me and learn. [Applause.] So I have the highest authority for urging oral teachers to learn the sign language.

Mr. President, when I arose I had in mind many more suggestions, especially one in the direction of a question asked by Mr. Noyes as to how it is to be determined who is to be taught speech in our

schools. I am prepared to cover that point and one other by a preamble and a couple of resolutions. It is rather unusual for us to adopt resolutions in this convention. Thought and discussion here are free, and we have rarely attempted to bind any one by resolutions. And we do not attempt to bind closely the opinions of any one. But I offer this preamble and resolution in the interest of a sentiment; but it is a sentiment which I think it is worth while to cultivate and strengthen by all the efforts in our power in this country. For it is a matter of great delight to me, as years have gone by, and as convention after convention has been held, that we have been able to bring together in this body of American instructors of the deaf, men and women who have at times held opinions almost violently opposed to each other; those who have been sometimes urging methods and pressing measures that were antagonistic and almost hostile; and it is the glory of this organization that we have worked now for twenty years nearly, since our canvassing the association in 1868, with a harmony of purpose and with a friendliness of spirit that challenges the admiration of the nations of the world. I believe that that very sentiment is worthy of cultivation; for I see in its prevalence alone, when that sentiment is held to and allowed finally to prevail, that the prophecy of my friend Dr. Fay can be fulfilled. If we are antagonistic to each other—at swords points—all of the time holding up the merits of rival methods, we reach little good. We bring forward our methods; they differ, and great independence of thought and opinion is allowed. We hear what our friends have to say, and they hear what we have to say; and we go home with the seeds which they have sown in our minds, which will bear fruit in the future. And so we go forward in the work which I feel to be a grand and noble work with a grand and noble spirit. And so I have ventured to formulate an expression of opinion which I think this convention certainly, if I have any appreciation of the sentiment of its members, even those who differ as to method, will be able to unanimously subscribe to. I think it will be a sort of covenant, if they do subscribe to it, each to the other, of mutual respect to those who have their different opinions, and to the desire to give and receive at all points where it is possible.

WHEREAS, The experience of many years in the instruction of the deaf has plainly shown that among the members of this class of persons great differences exist in mental and physical conditions, and in capacity for improvement, making results easily possible in certain cases which are practically and sometimes actually unattainable in others, these differences suggesting widely different treatment with different individuals; it is, therefore,

Resolved, That the system of instruction existing at present in America commends itself to the world, for the reason that its tendency is to include all known methods and expedients which have been found to be of value in the education of the deaf, while it allows diversity and independence of action, and works at the same time harmoniously, aiming at the attainment of an object common to all.

Resolved, That earnest and persistent endeavors should be made in every school for the deaf to teach every pupil to speak and read from the lips, and that such efforts should be abandoned only when it is plainly evident that the measure of success attained does not justify the necessary amount of labor.

I trust that these resolutions may be adopted by the convention without dissent. I should be glad to have them discussed, and any suggestions made with reference to them that may seem proper to the members of the convention. I offer this preamble and these resolutions for consideration at the present time.

THE CHAIRMAN: The resolutions are before the convention. Is there a second?

MR. ELMENDORF: I expected to be able to second these resolutions most heartily; and I can second the second resolution most heartily, with the proviso that these children who are given to articulation teachers for trial should be given to articulation teachers who are trained for the work, and not to novices, before saying it is a failure.

DR. GALLAUDET: I accept the proviso.

MR. ELMENDORF: Because in my short experience as a teacher I have not only known such things to be done, but I feel it my duty as an advocate of the articulation method exclusively to put that proviso in. With that proviso I heartily second the motion.

MR. GILLESPIE, of Nebraska: I am in favor of the resolutions, and will offer an amendment to the second resolution: that a general test be made, and that those who are found to have sufficient hearing to distinguish sounds, shall be taught aurally.

DR. GALLAUDET: I will also accept that.

The resolution was then put to vote, and carried unanimously.

REV. DR. THOMAS GALLAUDET: I always rise with diffidence among the practical educators, because I have been so long out of the details of the school-room. We have had this subject up in various ways. I simply arise to repeat what has already been said; that, in the first place, those who hear and speak know that the sound of the human voice is, perhaps, the most effective instrument by which we produce that inner thrill on which we build up the subsequent education of the child. How much more significant are the ideas of a letter coming from one whose voice we know. The voice comes to us as we read the words of the letter from some distant friend; and it is that remembrance of the voice which brings to the eye, perhaps, the unbidden tear, or swells the emotions of the heart. The orator who knows how to mold his voice, is one who knows how to sway the heart, the mind, and conscience of his listeners. Where is the substitute for the sound of the human voice? The motion of the lips is a very feeble substitute. Spelling out the English words and sentences is all very well as practice, but it is a feeble substitute; and so is writing out one's thoughts on the slate. I appeal to my semi-mute friends, if they cannot answer this question; if they do not know in the innermost recesses of their soul, that they need this language of motion; that they need these signs, thrown out with the expression of the countenance as those who hear me speak and throw out these sounds. We do not spell the words, and we do not think how they look. We throw out sounds, one after another, in common conversation that touch the inner life. And I believe, from my own experience from my earliest childhood, that we need this language of motion—another language. It is not the English language, and has no connection with it. Those of us who have used it for years, know that we do not speak the English language when we are addressing deaf-mutes. We are trying to throw a flood of light into their minds; therefore I make this simple plea, that persons may think of it, and see where the substitute is for the sound of the human voice, if it is not in the judicious use of this instrument, which we call our sign language. [Applause.]

MR. GILLESPIE, of Nebraska, here took the chair.

DR. GILLETT, of Illinois: Mr. Chairman and ladies and gentlemen, I have no lengthy remarks to make at this time. I think the reso-

lutions that have been adopted pretty fairly express my views upon this general subject. I am apprehensive that many of us may not attach all the importance to even an imperfect articulation and an imperfect power of lip reading that it deserves.

We have not made any Daniel Websters in speech or any Jennie Linds in music among our pupils, either in the oral institutions or in the sign institutions of this country. But I have seen enough of even a very limited amount of articulation and lip reading in the seventeen years that I have been in the Illinois institution to know that it is of very great value, and ought not by any means to be neglected or ignored.

The first paper read to us this afternoon was one that very greatly interested me and brought back to my mind some of my earliest experiences when we first embarked in the endeavor to teach the deaf to use articulation and to acquire the art of lip reading. I went over pretty much all of the ground in a practical experience that Professor Crouter has described as the scheme that he has laid down for himself and for the Philadelphia institution during the next few years. It was what seemed to me eminently reasonable and natural. But yet I found as I advanced in it, and as Professor Crouter will find as he advances in it, as a matter of practical work, difficulties that had not been anticipated. The scheme works well for a year and it may work well for two years; but I call Professor Crouter to take notice this afternoon that when he comes to carry out that scheme four or five years, when he finds that he has an institution within an institution, a classification within a classification; that he will find practical difficulties that it will be almost impossible for him to successfully overcome.

This matter of classification is not by any means to be ignored. It is one of those practical points that gives strength and efficiency to an institution. And the more your classification is perfected the more effective and efficient will be the work that you will succeed in carrying out among your pupils. Anything that tends to break up that classification, or anything that tends to prevent reclassification as circumstances make it necessary, is to be avoided. The classification can be modified all of the time. You may have a perfect classification to-day in your school, and next week you will have a different one. You cannot take five hundred, or one hundred, or fifty, or twenty youths and keep them exactly together in the same grade of improvement, and move them along evenly for one week. Your classification will be modified every day. And the wise Superintendent will, as far as it is possible for him to do, in view of other circumstances, from time to time modify his classification. Thus only can he best effect the work to be brought about.

And now, Mr. Chairman, on this general subject before us this afternoon, we should be very careful not to fix our minds, and especially not to fix our hearts, upon anything, as that we are determined to carry out. Why, this profession of teaching the deaf and dumb is but in its infancy. The very children of the father of it in this country are still with us. The men and women are present here on this floor, who remember to have made in real life the acquaintance of that noble benefactor, Thomas Hopkins Gallaudet, who first brought it to this country. We are only planting the seeds, only laying that foundation. And it is eminently wise that we so plant these seeds that the fruit shall be of that character that shall be best for tho

that follow us, and that the foundation shall be laid so that those who come after us may improve on what we have done.

I stand here to-day and feel proud to believe that we have advanced in a good degree upon what the fathers gave us; and I am bound to say in this presence, that when I come to consider all the discussions, and all the controversies, and all the new methods proposed here and there, in Europe and America, for the betterment of the methods of instruction that we pursue, I am bound to say in candor and truth that I feel more and more the wisdom of the fathers in the methods that they brought to us, and that have become more and more in vogue among us.

And now I am glad that upon this Pacific slope we find such a cosmopolitan gathering as is here to-day. There was one interested in an institution for the deaf and dumb who only a few days ago came to us from across the broad Pacific; there is another here who only a few weeks ago came to us from across the broad Atlantic; and here we are from all parts of this great country of ours. And as we come from the mountain and the prairie, from the hillside and the plain, all bent on one purpose and seeking one aim, so we come all ready to surrender anything that we may be shown to be defective, and glad to take hold of anything that may promise good. [Applause.]

Now, Mr. Chairman, it is not to be denied that there are some deaf-mutes who can be taught to speak; and I wish here to say, in the fear of God, that he is not a friend of the deaf-mute who throws anything in his way that will prevent his acquiring speech or the art of lip reading. [Applause.] And that finds a hearty response in the heart of every individual here present. Let us bring them as rapidly as we can to approximate as nearly as possible to the plane upon which we ourselves find ourselves, and to restore them as quickly as possible and as nearly as possible to the normal condition of men and women.

MR. CLARK, of Arkansas: I agree very fully with what Professor Noyes has said; that he did not see how any man can take sixty deaf-mutes and tell which ones to put in the articulation class, and which to put in the sign class. When I began in Arkansas last fall, I was confronted with just about sixty deaf-mutes, of whose power of speech and use of articulation I was absolutely ignorant, as I was of everything else in that institution, our articulation teacher having resigned within two or three days of the beginning of the term. But I had a very good teacher of articulation, and in consultation with him, we decided that the best plan was to make a test with every pupil in that institution of their capacity to receive instruction in articulation, and, at the same time, of their hearing. And it was not such a tremendous job. There were a great many of them that in five minutes you could tell that they should go into the articulation class, or should not. We did test them. Some of them went to the articulation class every day for a month, others for two months, and some for three or four months, and some of them were taken out at the beginning of the review work in the other classes, and I think there are still one or two whom I will take out next fall. Our institution now numbers eighty-nine, and every one of that number has had more or less teaching in articulation, until, in my own mind, I was perfectly satisfied either that that child could not be taught articulation to a practicable extent, or, that it was worth while to make the experiment. We have now about thirty who go to the articulation regularly. How it could be managed in a small institution, without much funds, and

where we could not have as many articulation teachers as we need, I cannot say. And the whole time that Professor Crouter was expressing his views, that one question: how did he cull them out? was running through my mind. I cannot see how it is done. I do not yet understand it.

DR. GALLAUDET: I would like to recite an incident, relating to one of the pupils in our school in Washington, which may throw some light upon the question of how to determine which pupils should be taught to speak. I have in mind a young man who has within a few weeks passed an examination to enter the college. He has been a pupil for a number of years in the Kendall Green school. He was taught four or five years in the manual method before we introduced the teaching in articulation some seven years ago. When we began teaching articulation, he was one of the earliest pupils taught. His sight was defective, one eye being turned, and he was not a very vigorous boy physically. His teacher labored with him for two years, and at the end of two years it seemed to me almost certain that he could never succeed in speech. But he was an interesting boy in many respects, and he was intelligent; and his teacher, who was very earnest in trying to succeed in every possible case, asked to be allowed to teach him still longer. He was continued another year, and his improvement the third year was more marked. During that year it was discovered, much to our surprise, that he had enough hearing to be trained. And so the oral method was begun with this boy; and the fourth year his progress in speech and lip reading, with the assistance of what hearing he had, was something very remarkable. And to-day he is no longer a deaf-mute. I may say that he is absolutely restored to society. He uses the ear trumpet with as much readiness as many of the deaf gentlemen here, and hears what is said to him through the ear trumpet, and speaks with great precision and clearness, reads from the lips with greater quickness than some pupils of oral schools, and stands to-day as one of the highest triumphs of the art. Yet, at the end of two years the scale barely turned in the balance whether he should not be given up as one with whom articulation and lip reading should be tried. So I say to all teachers, do not be in a hurry to give up pupils who seem not to be able to speak.

MR. CLARK, of Arkansas: I should like to ask Professor Gallaudet, if you had tested that boy during the two years aurally, as well as orally, don't you think you would have turned the scale sooner? We did that, also, in Arkansas.

DR. GALLAUDET: Quite possibly; but it was not suspected that he had hearing enough to be of any service to him. The new light of aural instruction had not radiated to us from Omaha. [Applause.]

MR. ELMENDORF: In this connection, I would like to answer Professor Noyes, as an articulation teacher, that we take them all. I would like to say to him, that I consider it impossible to make the selection as he says. In our school we have nothing but the articulation or oral method; and there are many times, particularly this year, where children have seemed to be entirely too stupid to improve by articulation. After one month or six weeks, or three or four or five months, the most of you would perhaps have given up. But the teacher who has charge of this little class that came to us at the age of six or seven, and some very much younger, has the patience of Job, and more, too, and never gives up. That teacher is Miss Moffatt, of our institution. She at one time told me, in conversation: "I do

believe that if a few of the sign teachers who think that we use discretion in choosing our pupils would come and look at my class, they would be satisfied to the contrary." There are from twelve to sixteen in her class, and during the very last month of the school there were six who were promoted to the next class above, whom I, myself, had given up as entirely hopeless. And that is the way it is with them all. There is a moment that comes when they seem to wake up. And no one has the right to take away the chance of that awakening. And to try it for a week, or six weeks, and then to say they cannot learn articulation, is, I think, impossible.

MR. NOYES: I would like to add that my experience is perfectly in accord with Professor Elmendorf's. I recall to mind one little boy from whom during the first year it was almost impossible to get a sound that we could get hold of as an indication that he had ability to speak, yet to-day he is a fair articulator. His voice is weak, but his intonations are clear and distinct. If we are going to begin at the beginning of the first year, we have got to go over the same ground the second and third year before we can be sure we have thoroughly sifted the matter and got those who are proper subjects for the oral department.

I presume that almost all of the teachers here have heard the history of Teresa Dudley, the daughter of Hon. Mr. Dudley. You remember that she was taught two or three years in the American Asylum, at Hartford, where she acquired a very fair knowledge of language; but that she had not obtained a knowledge of oral speech at that time. But I firmly believe that the training and cultivation of mind, the command of language that she had when she left the sign school, had so awakened her that she was just in a condition to take hold of oral speech and make the advancement which she did; and that the training which she had previously had, fitted her for the higher and nobler experiment of oral speech, and that through that and the faithful training she had she attained the degree of articulation she now possesses.

I use this as an argument to show that we should try not only once or twice, but again and again to see whether there is an ability and power to read the lips.

MR. WILLIAMS: It seems to me that it is impossible to determine at once who are and who are not fit subjects for articulation. In our schools we have two skillful teachers of articulation; and all the new pupils are put into their hands and kept there until we are satisfied they will or that they will not succeed, and that it can never be of any practical use to them.

Our experience of last year has led me to believe that we sometimes make a mistake even then. There was a boy who came to us four years ago; and he was, after a test, found to be, as we thought, an unsuitable subject for articulation. He was rather a dull boy at that time, and there seemed very little hope of any success in that line. He remained in school a year or two; was then out for two years, and came back and was in school another year. At the end of that time he began to ask to be taught articulation; began to try to speak some words. We then tried him again and found that his mind was waked up through the instruction that he had received in the sign language; and that the boy showed some aptness and some ability to succeed. We took him up and gave him special instruction, in order not to break into the class at that time; and during this year he has had

individual instruction for fifteen minutes a day only, but he has progressed so rapidly that I think that next year he will be able to go on with the rest of his class who have had articulation for three years.

We find this difficulty also; that oftentimes when pupils are first taken up they seem to show great aptness in articulation; will learn the elements and the symbols and combinations, but when you go a step further and begin the more complicated combinations; begin to put words into sentences, some of them will fail utterly, and we cannot get them out of that condition. And so it seems to me that the only way in which we can decide ultimately who are to succeed and who not, is to continue the experiment for some time, and after an interval to repeat the experiment.

MR. CROUTER: I desire to ask Professor Elmendorf whether in his institution he meets with any failures in the teaching of articulation?

MR. ELMENDORF: During the four years I have been there I have had two cases of failure. One of those cases was frightfully cross-eyed and near sighted; the other was slightly idiotic. The father of the one who was slightly idiotic was one of the Directors of the school, and would not have his child taught privately, but insisted upon his being in the school. That boy came to the school some time before I went there. When he left the school—Mr. Greenberger, the Principal, insisting upon it at last—he could not talk or speak, except to make his own mother, and father, brother, and sister, and personal friends understand.

The other boy had a very fair education, and spoke very distinctly, but with a powerful voice. It seemed to be impossible to make him understand that he was talking too loud. He is understood very well by his own friends at home, and is now in business with his father and doing very nicely. I consider those failures. The parents seem to be satisfied with them.

MR. CROUTER: In the changes I refer to, made from our oral branch to the main institution, the test has been continued for three or four years. It was not a month's or six weeks test, but a test for three or four years; after which we thought we would try the sign method.

In regard to the difficulties of classification referred to by Mr. Gillett; as yet we have not met them, and I do not apprehend that we shall meet them. I believe it to be perfectly possible to carry on our oral school with an attendance of one hundred pupils or more, and keep up a perfect classification in both schools.

MR. NOYES: Do you have two divisions in the same class?

MR. CROUTER: In the most of our classes we do not have.

MR. ELY: In the Maryland school we take all the children that come, no matter what capacity, put them under articulation teachers, and give them a year's faithful trial, and we do not drop any one until the end of that year. Then, of course, only those that we are satisfied from this experiment of a year will not profit by oral instruction, are taken out of the oral class.

I desire, also, to say, in reference to the idea suggested in the paper by Professor Crouter, that the communications of the pupils by signs in the oral classes with the other pupils on the playground and out of school, that probably will not interfere with their speech, that that is in harmony with my ideas. In one of my published reports, two or three years ago, I expressed the idea that instruction by means of signs, the manual alphabet, and all of the means employed to reach the minds of the deaf and develop them, are of great assistance when

we begin instruction in speech. Subsequent experience has confirmed me in that idea. I believe that the first thing to be done in instruction in speech is to reach the mind of the child, and set it to thinking. Having done that, and having done it effectually, as we do by the means which we employ in the early months, the first year of teaching is the very best preparation for commencing the instruction of speech. I believe it is a very important help.

MR. KNIGHT, of Oregon: I am here simply as a learner—as the Superintendent of a young and small institution—and I wish to ask the wise men of the east a question. The difficulty with us, when we come to the question of oral teaching, as we often do, with the small number we have, how shall we do it? My Trustees make the objection that they have not the funds to employ a separate teacher. We have heard a great deal about combinations, and Herbert Spencer says: "Life is a combination of heterogeneous changes." And among the heterogeneous opinions of the past, or through them, or the influence of them, we seem to be coming to some harmony. Shall we ever have a perfect combined system until we have both systems understood by every teacher? Would it be best for me, as a Superintendent, to try to employ a teacher who understands both methods? and would it be possible for that teacher to meet the difficulties of the case, teaching both classes of pupils, considering the fact that we are unable to introduce the oral method separately? Is there any school in the country where such teachers are educated; or is there any tendency in this direction? If you take the suggestion of Professor Gallaudet, of Washington, and these oral teachers perfect themselves in the sign method, it seems to me that before long we will have a settlement of this problem. Would it not be a good policy to look to the idea, finally, of every teacher of the deaf and dumb understanding, not only the sign and manual methods, but the oral method also? In the meantime, my question is this: What shall we do in small institutions, where we are not able to have the combined method, for the reason that we are not able to employ a sufficient number of teachers? How shall we combine the methods in one?

THE CHAIRMAN: I will call upon Dr. Peet to answer that question.

DR. PEET: A hearing child hears a great deal of language before he is able to pronounce a single word. Speech is the result of hearing. So I think that successful articulation on the part of a congenital deaf-mute should always be preceded by lip reading. I do not like the voice of a great many of the congenital deaf. Many of them, as we have discovered in our examinations of late years, can hear sufficiently to modulate their voices. Some of them have spoken before they became deaf. But you take a totally congenital deaf-mute and his voice is not agreeable. It therefore seems to me that it is of comparative little importance whether you succeed in such cases in teaching them articulation. But I do think that it is of the greatest importance that you should teach them lip reading; then every person with whom they come in contact can communicate with them directly. They can get the language floating around in the world. Then they are given what is almost equivalent to hearing. I have no hesitation in saying from my experience that lip reading is much more easily taught than articulation; that it is more important; that it is the foundation of articulation, and that if we will expend our strength in that direction we shall accomplish more than we have ever accomplished before. I think it is a great deal better

to make our advances in that direction. The moment a deaf-mute is able to read the lips of other persons he will endeavor to imitate them; and he will endeavor to speak; will make greater and greater efforts, which will be crowned with greater success.

MR. ELMENDORF, of New York: I should like to state here that that is the articulation method. They must learn to read lips before they can get speech.

I will state in answer to Mr. Crouter's question as to what I mean by failure or success as follows: Last year, in the highest class in school, there were five boys, and three of those boys found positions; I going with two of them, the other one went alone. He said he thought he could get a position. I was very much pleased and surprised to receive a letter from Mr. Anderson, an engraver in New York, stating that he had engaged a boy that was a deaf-mute; and that he came from our institution, and referred to me; that he was the first deaf-mute that he had ever spoken to without any trouble, and that it was the first deaf-mute he had ever heard speak intelligibly. He had been in our school ten years. That is what I call perfect success.

Speaking from my own experience, about sixty per cent only of the pupils which I have seen have done nearly as well as that. There are some who cannot converse with strangers, as there are some here who cannot understand the signs of others, just in the same way as I have heard it stated. There is something different in the signs here and there. There is always something different in the lips of different persons. Some people do not talk distinctly. Some people shut their teeth; others have imperfect mouths. Some people mouth too much to deaf mutes; a great many teachers do, and that is a great hindrance. But about sixty per cent of all those that I have seen I consider their training successful. There are but few that, looking at it from my standpoint, I consider failures. Will you tell me any normal hearing school in this wide world that can show any better average of success than that?

THE CHAIRMAN: I now have the honor of introducing to you a gentleman from Sweden, an instructor of the deaf and dumb, who I think you will be glad to hear from—Oscar Krutmeyer.

MR. OSCAR KRUTMEYER: From the great interest in the education of the deaf and dumb as well as the blind, I am sure that the delegates here now congregated will allow me to describe the oldest and largest institute in Scandinavia.

In the year 1809, Mr. Pehr Aron Borg commenced, under a great many obstacles (as all deaf-mutes in those days were considered the same as idiots). He, so far as his private means would allow, established an institute close to Stockholm, Sweden, which was named Manilla, where he for a number of years gave instructions to the deaf-mutes by signs, and to the blind by relief printing, adopted by himself, which methods to this day are the same practiced. But it was soon shown that there were more of these unfortunates than could be accommodated in his school, and that it had to be enlarged, when it became a State institute. Mr. P. A. Borg was chosen to be one of its Directors and its Principal.

During the time that the school was Mr. Borg's private concern, he used for to show—contrary to the common belief that these our unfortunate fellow-beings could not be taught anything—that a Supreme Being had made some remedy therefor, to take his pupils and trave^l

several hundred miles over the country to show what he had accomplished. His name spread with rapidity all over Europe; and he had not been working long in this noble cause before he was called by the King of Portugal to Lisbon, to lay a foundation for an institute there.

During the latter part of his life he was aided by his son, Mr. Ossian Edmund Borg, who at that time was studying medicine at the University, and who, after the death of his father (1839), became Principal, in which position he continued to 1874, when he retired. During that time he, on a large scale, reorganized that institution, and was to a great extent the cause of establishing several of the small ones now in existence in that country.

Mr. O. E. Borg, a Freemason of high standing, has been decorated a Knight of the Royal Wasa Order, Swedish; Royal Dannebrog Order, Danish, and Imperial St. Anne Order, Russian, besides being made an honorary member of the Deaf Mutes Societies in Paris, Berlin, Copenhagen, etc.

In memory of his father, his countrymen have, by contribution, placed his bust (bronze on a granite pedestal) in front of the institute, and have besides contributed a large sum of money by which, from the interest thereof, several poor deaf and dumb children are kept at that institute.

Mr. O. E. Borg has a son and a daughter employed as teachers.

Manilla is also a seminary for both sexes. The teaching of the deaf-mutes is both by sign and by speaking, and is divided into three classes. Each class has one male and one lady teacher, and twenty-five to thirty pupils. Besides those three classes, there is also one confirmation or graduating class.

STUDIES—*The deaf mutes* of both sexes are taught religion, history, geography, arithmetic, natural history, writing, drawing, accounting, and letter writing.

LABOR—For the male sex: Tailoring, shoemaking, carpentering, printing, bookbinding, and blacksmithing.

For the other sex: Sewing (both by hand and machine), cooking, washing, and ironing; all deaf-mutes, besides, in gardening.

For the blind—Religion, history, geography, natural history, arithmetic, astronomy, mathematics, writing, and music.

LABOR—Basket-making of straw and rattan, knitting, and crochet.

The course is from the fifteenth of August to Christmas, and from January fifteenth to one of the first days of June, when there is a public examination.

The teaching at the school comprises thirty hours a week, and for the labor fifteen or twenty hours. There are also taught gymnastics and swimming.

During the time I was at Manilla (1864 to 1868) there were about two hundred deaf-mutes and eighty blind pupils, but according to my latest information there were last year only one hundred and thirty-five deaf-mutes and fifty-eight blind, which comes therefrom that they are now divided on the smaller schools in different parts of the country, which together contain about one thousand pupils.

THE CHAIRMAN: I had the pleasure of conversing with Rev. Dr. Wines, of Illinois, a member of this convention, upon a visit he made to an institution for the deaf and dumb at Stockholm, and he spoke of it in the highest terms. I think it is a great pleasure to have this gentleman with us. Dr. Wines sent to me for distribution here, spec-

imen copies of a paper which he has just commenced to publish, entitled, "National Record of Corrections and Charities." He proposes to make that paper of very great value, and I can heartily commend it to all members of the convention.

Before I left home, one of the young ladies of our school wanted to know if she might write a letter to the convention. I told her I thought the members would listen to it, and if you will kindly accord with my quasi promise, I will ask the Secretary to read the letter of this young lady.

The Secretary then read the following letter, signed "Georgia Elliott," which was received with applause:

Kind Superintendents and Teachers:

I ask the dear privilege of calling your attention to the young deaf and dumb ladies, who in all these years have seemed to be forgotten, while great attention is given to the higher education of the deaf and dumb gentlemen. Look at the excellent National Deaf Mute College, and its door which is always flung wide open to welcome the gentlemen, but not the ladies. I am deaf, but not dumb, and my great desire is to obtain a still higher education, as many others of the young girls of the United States do. I have been attending school regularly at the noble institution of Illinois for the past few years, which has given me such fine advantages. From the primary grades I have been pushing steadily forward until now, having nearly completed the course, I am not content with my achievements, for I have but tasted of the fount—beyond lies the ocean of knowledge. Girls and boys are educated together in all common schools, in several colleges, and in all the institutions; why should they not be educated in the national colleges? Girls have in all schools as high a rank as boys; indeed, they generally rank higher in their studies than boys do. Thus, it is evident that they would improve their advantages at the college as well as the boys.

Girls need a higher education as much as boys. Their influence upon society as women, as mothers, as sisters, is very great, and a thorough education will better fit them for all their duties. They exert the greatest influence on the active men that do the business of the world, and can use their strength for good or ill, as they like. As the civilization of any country advances, the scholars begin to inquire what the causes are that make it advance, and one of the greatest helps to improvement of every kind, has been learned and good women. They have the first years of all lives in their care, and can mold and direct them as they will. Among hearing persons, great attention is given to the higher education of women. Look at the many excellent academies, seminaries, and colleges: Wellesley, Nassar, Smith, Mt. Holyoke, and a host of others. Look, too, at the opportunities given them by Harvard, Columbia, Amherst, Michigan, and other colleges, for the pursuit of advanced studies. Is it not a reproach to our educators of the deaf and dumb, that in all these years they have provided no college for the deaf young women?

The majority of teachers in our institution are women, many of them deaf and dumb. How much better fitted they would be for such positions if they could go through a collegiate course. The girls of to-day are to be the women of to-morrow; and the country does well that looks after the education of its girls.

What would the additional expense be to the United States Government when compared with the great benefits to the pupils? Could a few thousand dollars be spent to any better advantage?

GEORGIA ELLIOTT.

The following resolution by PROF. A. E. FAY was adopted unanimously:

Resolved, That Mr. Wilkinson be requested, in behalf of the convention, to thank President and Mrs. Homer B. Sprague for their courteous invitation to visit Mills Seminary, and to express our regret that the pressure of the business of the convention will render it impossible for us to avail ourselves of the invitation.

PROFESSOR WILKINSON here proposed the names of certain honorary members.

Here the convention adjourned until two o'clock p. m. to-morrow.

NIGHT SESSION—NORMAL SECTION.

THE CHAIRMAN: The subject for discussion to-night is "The Sign Language," to be led by Dr. I. L. Peet.

DR. PEET: I regard this section as perhaps of greater importance than any other—that is, in regard to method of teaching. Every person naturally selects the method that seems to him best, and it is not absolutely essential that all teachers should teach the same subject in the same way; but it is very important that when we have a language which is to be used by all the deaf mutes in the country, where they are constantly interchanging residences, where they are meeting each other, where they wish to communicate with each other frequently, and when, as is so often the case, a teacher of deaf mutes visits other institutions, that they should teach the same. It seems to me of very great importance that this language should not only be perfected, but that it should be made uniform. And this seems to be a very favorable occasion for laying down some of those principles upon which we can probably all agree—to bring together by way of comparisons the signs for particular ideas and words as used in different institutions.

I would say by way of preface of the few remarks that I propose to make upon the subject, that the sign language as we have it in this country was originally brought from France. There is a little French letter, which is a French word, which is used in all sorts of sense in the French language, and is also used in all sorts of sense in the sign language. I allude to the little word, and the little letter, "*il y a*." We say "stay there" [showing by signs]. It is one of those little internal evidences of the origin of the sign language as having come from France. A little initial sign given a word that is used universally. This sign language the early teachers learned from Mr. Clerc, and Dr. Gallaudet brought him over to this country as a living exponent of the sign language. I remember Mr. Clerc very well; a fine, portly man, clear in his gesture and wonderful in his expression. And the early teachers of the deaf and dumb all learned the language of signs in Hartford from Mr. Clerc, and also from Dr. Gallaudet. This language of signs is perpetual only as it is founded on correct principles. The language of signs which Mr. Clerc brought to this country was essentially a pictorial language. The deaf mute thinks in pictures; always has before him the picture of something. His whole memory is a panorama which passes before the vision of his mind, and every thought takes a pictorial shape. Put two deaf mutes together and in a very short time they are making pictures in the air to each other, so as to represent these pictorial thoughts. And this is the genius of the sign language. We do not begin at the last of a sentence and make signs backwards until we get to the beginning. We make signs in precisely the same order that the artist puts his pencil upon paper. The line that the artist draws first is that first drawn by the sign-maker, and one is just as much an artist as the other. So if you wish to ask what is the natural order of signs, I would say it is the order which is necessary in order to make a complete living picture.

In representing the sign language a man has to be, to a certain extent, an actor. If any person who is not familiar with signs will *take it as the first rule* that he will ignore all fear of criticism, all

dread of being laughed at, and at once get at the thing he wishes to express, he will learn to make signs very rapidly and very accurately.

One of the points in the sign language is location. As I said before, that is a part of the picture. You locate everything which you wish to express with its relations to the other things, and there you have the picture. In describing animals you represent their movements and general shape. With the elephant you represent the trunk and the tusks, and the heavy solid movement, and the moving of the trunk. With the cow you represent the horns, the general shape, and the milking of the cow. With the horse you represent his ears and mane, and his fine shape, and the straddling of the horse. That makes a full pictorial sign. Birds are made in the same way in connection with their method of flying. But such full and complete pictorial signs take up too much time for rapid communication, and our practical deaf mutes reduce these signs to the shortest space. Take the ears of the horse and ride him and you have the horse. Take the horns and milking, and you have the cow. We do not go through all of the movements which are necessary to make a complete picture; but we make a reduced or condensed picture.

The next class of signs to which I will call your attention are the metaphorical signs. If we wish to make a sign for obstinate we make the ears of an ass or mule, and the obstinate position. I remember very well that on one occasion Mr. Gamage, seated at the teacher's table, said that on one point he was absolutely determined; that his determination amounted to obstinacy. And one of the Directors of the institution, who was visiting that day, asked the servant girl, when passing behind him, what Mr. Gamage was saying, and she replied, "He said that he was an ass." But you are all familiar with that sign. We generally make it with one hand.

I was once asked by a lady why we make the sign we do for "late." I said to her, "Can't you see that it is a little behind hand?" And that is precisely the same metaphor both in signs and in words.

Another metaphorical sign which is precisely the same thing in words and in language is the sign for "confess."

There are other signs that may be called signs of indication. You point to your feet to represent your feet. Speaking of our nose we touch the nose. We, also, refer metaphorically to signs of indication. We teach and give the sign for "red," and we touch the lips; and the sign for "black" we touch the eyebrows.

I am aware that I am not addressing those who are unfamiliar with this subject. But it seems to me that it is well for us always, however familiar with the subject we may be, to consider the different classifications of the subject, to make it easier for us to explain to others the principles of a very natural and very easily learned language, if people go to work in the right way.

The latest advances in the sign language are two points: First, in the order of signs, and second, in the order of condensed signs for special words. In regard to the order of signs: In ordinary translation between a person speaking in the sign language and the deaf-mutes, we adopt the general order of the English language; and there is always one center which expresses the whole idea of the sentence—which is the key of it; and if you represent the keynote in a sign sentence, you give what is almost an interpretation of the whole. But persons translating in the general order of certain words have made this singular mistake. They have given a sign f

word in a sentence. A phrase, a clause, a metaphor, or a metaphorical expression, composed perhaps of several words, is generally represented by a very few signs, perhaps not more than one or two. In the idioms of a language several words are brought together to express a single word or single idea, and this single word or single idea is generally translated by a single sign. When you make a sign for each word in a phrase or a clause or an idiom, you just spoil the whole thing, and take away all its life. There is no significance in it, and you create confusion in the mind of the deaf-mute. But if you take the general order of signs, the plain language, and when you come to this idiomatic expression or phrase or clause, give it in a single sign, or the one or two natural signs which express it, and which have their equivalent always in single roots, in single signs, then you are giving the sign language naturally. And that, I should say, is the secret of successful translation into signs. Seize the speaker's meaning, and then give it to the deaf-mutes in the way in which they would be most likely to understand it; and not attempt to follow out each word, especially in these metaphoric phrases and clauses. That, as I said, is one of the general improvements that has been made in the course of years. You will notice, perhaps, that, as we have convention after convention, the sign language seems to be more easily adapted to translation. It is one of the most difficult things in the world to take the thoughts of one man as he expresses them in one language, and translate it rapidly and clearly into another language. There is only one thing more difficult than translating into signs, and that is translating from signs into words. [Applause.] And the difficulty of that is that we are not half so smart as we think we are. The English language very few people understand. We all of us believe we understand the sign language better than we do the English language. It is an exceedingly difficult thing for any man to express his own thoughts in words clearly and fully. When we write we have a thought existing in our minds which we wish to bring out in so clear a manner that every one may understand it. If we extemporize we shall have an approximation to that thought. If we are writing and dash it off we shall have an approximation to our thoughts. We shall not give it fully, clearly, and perfectly. In order for any man to fully express his own thoughts he has got to make about as regular approaches as an army has to take a fortification. He gets nearer and nearer the idea by successive action, by successive sentence. Some men write in that way. They first express a part of their idea; then repeat it, and say something else and repeat it, and say something else, and get nearer and nearer their thought. That is the peculiar style of some writers. They cannot tell you the whole thing first, but they get nearer and nearer to it in successive sentences. But only those writers who have rewritten the same thing many times and made many corrections in their writings can give any thought fully and in the exact words that belong to it. This has led me to believe that the phrase, "We think in words," or "We think in signs," is all nonsense. Our thought is entirely independent of words, and entirely independent of signs. It exists as a picture in our mind, and then we go to work and try to express that thought in words.

For that reason, I think that the language of signs has been greatly abused in the minds of those who think that it is an injury to the *deaf-mute* to use signs instead of words. They say they think in

signs. They do not think in signs. Sometimes I think that if our pupils would think at all, it would be a great improvement. If we first have the thought, then express it in signs, and then express it in words, then we have accomplished a very great victory.

So, as I have said, one reason why it is harder for a person to translate from the deaf-mute signs, however clearly they may be related to the English language, than it is to translate from the English language into the sign language, is, that we all understand signs better, really, than we do words. The command of language which will enable a man to take the deaf mute's clear thought and go with him from beginning to end, keeping pace with him and giving the exact idea clearly and fully in words, implies a very remarkable knowledge of the English language; and that is why it is so difficult. It is not because we do not understand the deaf-mute signs. I can sit down and listen to a deaf-mute sign maker, and follow him perfectly. But if I am called upon to put those thoughts into words, clear-cut, terse, and expressive English, I feel as if a task were imposed upon me which is greater than I want to perform at the moment.

The next advance, as I understand it, in the use of the sign language, is in uniting the manual alphabet with the natural gesture which expresses the idea. If anywhere you make a mere agreement upon a sign, and that sign does not have within it those elements which will make it acceptable; if it has not as clear a derivation from other and accepted signs as English words have from other and accepted words, the deaf-mutes will reject it. But if there is a clear reason for it; if it is directly in the line of sign etymology, it will be accepted and will be used.

In rapid talking by signs, we cannot go through the whole definition of a word when we give the word itself. And so following out the analogies, we take certain rules of sign etymology, just as we have certain rules for the etymology of words, and we get one sign or another.

I think one of the most striking signs which is founded upon the manual alphabet and upon the idea which the sign is to convey, and also even upon the Latin word from which our English word was derived, is the sign for "religion." We take the letter "r," which is a twisted cord, or rope; we put it upon the heart, and we tie the heart back to heaven. We take the letter "r," and point to heaven, and bring it down to the heart. And that is all there is of religion. It is a short, easy, and expressive sign.

The sign for "institution" has been generally diffused throughout the various institutions for the deaf and dumb. We used to speak of institution for the deaf and dumb as a building; something that is built up with a roof and with the sides down, within which the deaf and dumb go to school and have their hands feruled. [Showing.] Now we make the sign "i" with one hand which looks like the spire of an educational institution, and make this sign for institution. [Showing.] And when we talk about any kind of institution, political, charitable, or social, we make the same sign.

Another sign which is very similar, founded on the natural sign, is the sign for "instrument." You take the lever as perhaps the fundamental idea of the word instrument, just as the wheels are the fundamental idea of the sign for "to go." You take this letter "i" and use it as a lever and you have got "instrument;" and then you can talk of all kinds of instruments; a musical instrument, a

instrument, or a surgical instrument; anything which you pry up anything with.

Then the sign which I once brought out in my former lecture, on Initial Signs—the sign for blessing. I have always studied signs in connection with my pupils, and not with hearing persons. I want to have a deaf-mute teach me. I get half my ideas from a deaf-mute. The deaf-mute teachers in our institution meet at my house every Tuesday evening, and we study the sign language together. I generally take a passage of Scripture and read it, in order that we may be better prepared for Sabbath exercises, by signs, and they give me the sentences, the words corresponding; they spell them out as they recognize them, and if they cannot recognize the word, I say there must be something wrong in it, that you do not recognize that word. And I try it again, and get a better sign if I can, and keep on, until finally we get a sign that I am sure they understand, and they give me a corresponding word. It often happens that one of them suggests a sign which is a good deal better than mine, and I accept it.

Once when I was teaching in a high class who were studying signs together, I said to them, "What is the best sign for philosophy?" Every pupil in the class tried to give a very succinct sign for philosophy. Finally one of the girls took the letter "p," made the sign for thought, and put it under the other hand, and I recognized at once as thought plowing under the surface of things. That is philosophy. So we always speak of that as philosophy.

Supposing we have a sign for each word in the English language. Is there any more harm in using the English language in making a sign for the word, than in using the English language by writing it or by spelling it? We are not using the sign language in either case. We are using the English language when we make the signs in the order of the words, putting all of the words in. But there is this advantage, that it is shorter, clearer, and more significant. The sentence, perhaps, does not translate itself, but words do. Every word in the sentence is made clear to the mind of the deaf-mute, although the whole force of the sentence is not made clear, and they have to work that out for themselves and to choose either spelling or writing. For that reason it has always seemed to me, that the force of the argument against using signs in the order of words, if we wish to do so with intelligent deaf-mutes, or wish to converse with each other in the English language, was very much weakened.

I am not at all afraid of signs used in the order of words, although I do think that pictorial signs, or pantomime, which is the same thing, ought not to be discarded in communicating with the deaf. The great advantage of pictorial signs or pantomime is that you bring the sign before the minds of your pupil. You do not give them any hint, as to the word which they are to use. You give them a simple idea, the same kind of an idea you would give them if you showed them a picture, and then the deaf-mute seeing those signs, tries to convert them into language; for other words to express in his own language an idea given to him, as he attempts to describe what he had seen.

A fine picture of a scene is a great help to the deaf-mute, because it is not in the English language. A decent scene that we are passing is a great help to the deaf-mute, because it is not in the English language. A picture of a scene is a great help to the deaf-mute, because it is not in the English language.

This all seems to me to be perfect nonsense. I accepted long ago the opinion of the elder Gallaudet, that the more ways in which you can put language, the more language in which you can express an idea, the more ways in which you get them to think the better you understand that language. The mind is stronger.

In expressing the word "fact," something done, I take the letter "f," put it down as accomplished, and cut it off. I make an assertion. It is an asserted thing; and all of these emphatic signs are alike, and you can use whatever initial letter belongs to a corresponding word.

There is a sign for "time" which we use in New York, which is different from that used in some other institutions. We take the letter "t," and make a single circle with it, to represent the word "time."

The other day it struck me that our sign for "travel" or "journey" was rather difficult, so I consulted with some of my deaf-mute assistants, and they concluded that the new sign which I suggested was better than the old one. You know we take the revolution of the earth, and a journey is a day's movement. So we not only make this general movement, but we give the idea of the revolution of the earth, which is the journey. Instead of that we travel now in an altogether different way from what we did. So I take the letter "t" for the initial of "travel," and also make the smoke-pipe of a locomotive or steamer, and we travel in that way now. [Showing.] That is a very short sign.

You all know our general sign for "nations." Dr. Gallaudet and some others take the letter "n" and indicate a little place upon the globe for the nation. Take the letter "g" and we get "Gentiles."

A great many of these signs are exceedingly natural. If you wish to discover anything you take the cover off of it. So our sign for "discover" is to make the sign for the letter "d" and point down.

Has it ever struck you why we always make the sign we do for "from?" You notice that it is the same thing that is for the letter "x," the Latin word for "from" is "ex." The word "experience" means that we fish a thing out. The other day I had the word "exorcise," and I did not know how I could make my deaf-mute audience spell the word "exorcise," in my reading of the Scripture. The magician who was going to exorcise the evil spirit put up his hand and moved it in this way. [Showing.]

With these few words, and willing to answer any questions that may be put to me, I will refrain from trespassing upon your patience longer.

MR. NOYES: It has always seemed to me that one of the great points in the sign language is that it is natural, and so emphatically so that pupils in all of our different institutions can understand the signs made, and that even foreigners who have been taught in sign schools, or in schools for the deaf, when they come here very readily understand religious services, when they are conducted in the natural signs. It seems to me that if we are going to have in the New York and Philadelphia institutions some initial letter, or some little motion of the finger which may be akin to the letter, where will our natural language be?

PEET: I will answer your question by asking another: Suppose is some word you cannot express by natural signs?

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MR. NOYES: It has always seemed to me that one of the great points in the sign language is that it is natural, and so emphatically so that pupils in all of our different institutions can understand the signs made, and that even foreigners who have been taught in sign schools, or in schools for the deaf, when they come here very readily understand religious services, when they are conducted in the natural signs. It seems to me that if we are going to have in the New York and Philadelphia institutions some initial letter, or some little motion of the finger which may be akin to the letter, where will our natural sign language be?

DR. PEET: I will answer your question by asking another: Suppose there is some word you cannot express by natural signs?

MR. NOYES: If I mistake not, in my early days your honored father stated in public that there was no clear, definite, and distinct

idea but what could be conveyed through the medium of the sign language.

DR. PEET: Yes, sir. But if you get a sign which is perfect in every relation that it can hold to a word, and has in itself a significance, and is very much clearer than any other sign, why should you reject it simply because it is new?

MR. NOYES: My idea would be to hold on to it if it is natural. In Minnesota, when I first went there, I had a school-room which fronted on the street, and sometimes when I was busy with my classes I would see their eyes going towards the window; and looking in that direction I would see, perhaps, half a dozen Indians, their eyes just over the closed blind, looking in. I called them in sometimes; gave them a seat to let them see our natural signs. They understood them readily. But if I undertook to use some of these initial signs, or these arbitrary signs, they would be all confused. They understood the natural signs, and took in the thought readily. And if we convey our ideas clearly in the natural signs, why not hold on to them? If this natural sign language is competent to convey to the mind of deaf children these ideas clearly, it seems to me that it is important to hold on to this general language of signs, so that we may be readily understood; and so that if a teacher passes from the New York institution to the Minnesota we shall not be all in confusion. If there is a general natural language of signs let us have it and hold on to it. For school-room purposes I admit that initial signs are very excellent, and very desirable; but I refer now to general discourse in the sign language. The object of sign language is to enable us to reach the minds of children, and convey to them ideas which they cannot understand in the English language.

To give an instance of the power of the sign language which I shall never forget: About three years ago a girl thirteen years old was being sent to me, and on her way to school for the first time she ran away from her father at the depot and started for home. Her father advertised for her, and in a few hours she was taken up on the railway track on her way home, with her shoes in her hand, where she had defied the railroad train and stopped the passengers by remaining upon the track. It took five men to put her into a buggy and shut her up in jail. They telegraphed to me asking if I had lost a crazy mute. I had never seen her. She was brought to me; and every man, and every human being, she seemed to think was against her, and she was terribly against them. The first time I went into the house to meet her I found her in the middle of the room, looking like a demon, if I ever saw one. The only articles in the room were an iron bedstead with woven wire mattress, and a trunk. She put her foot through her trunk as quick as I could put it through a straw hat. In a little while, by the use of the sign language, as she could not understand a single word or letter, I got hold of the girl and quieted her down, and she is to-day an interesting, a happy, and intelligent girl. In less than three days' time I had her quiet, and she understood me to a considerable extent, and I understood her, and there was established quite a friendly relation right away. And this was all through the medium of natural signs.

It seems to me that there is something in natural signs that we want to hold on to and keep until we can get these children lifted up into the English language, and then we do not care anything about it. If there is a genuine sign language that the Indian and the uned-

educated deaf can understand let us hold on to it. If we can improve on it, very well. But it seems to me we should seek for that which is natural and easy; which will convey easily to uncultivated minds the ideas we have in view.

MR. WESTON JENKINS: I rather deprecate this discussion of the uses and advantages of the sign language. There are many different views to be presented here, and a good many teachers who are here very probably think that the sign language is of no use in the school-room; that it is an incumbrance rather than a help. But if all the views and different opinions are brought out in a controversial way and taken down in the records of the proceedings, I fear, with the Apostle, that the world itself will not contain the books which shall be written.

MR. WALKER: I cannot agree with the last speaker. I think there is a great deal to be learned by discussing this language of signs. I am a young teacher myself, and while I agree with all who have spoken in favor of natural signs, I think there is a great deal due to the originator of these initial signs. They have been a great benefit to me and to all of us. We have unconsciously got into the use of them; and they shorten interpretations very often. They are often very handy; and I use them; and I do not believe it hurts anybody to use them ordinarily. I believe the use of natural signs and of pantomime where necessary has a beneficial effect.

As an illustration of pantomime Dr. Peet read "The seven ages of man," which was interpreted by Mr. C. W. Gamage with great applause.

THE CHAIRMAN: I think the audience would like to hear from Dr. Gallaudet, of Washington.

DR. GALLAUDET: I have listened with great interest to the remarks made in the early part of the evening; one in particular to which I will refer briefly which seems to me of very considerable importance to those who will be sign makers, especially to those who will undertake to lecture in signs; to speak to a body of deaf-mutes, children or adults, or one who will attempt to translate from speech into the language of signs. A little later on I shall have a remark to make with reference to translating from signs into speech, about which something was said a little while ago, and I will then give my reasons for so doing.

First of all, in the expression of one's ideas by signs, to speak from my own experience I would say that, dating away back to the time when I first attempted to lecture in Hartford many years ago, having prepared the notes of a lecture of an historical character, I went to my room and before a mirror delivered the lecture. I studied carefully all the signs and what series of signs would convey the ideas that I wished to convey clearly and distinctly without repetition. I do not say that I study my signs before the mirror now. Perhaps I have gotten by that. But I will say that it is my practice when I am about to go to a Sabbath school to open its exercises, and to read a passage of Scripture, it is my practice up to this present time to have the passage of Scripture before going to the chapel, to read it over carefully, and to determine in my mind how I will present this or that passage in signs. I do not give the actual words. Take for instance the expression: "Though he slay me I will yet trust him." I read that over and see in what signs, in what form of expression in signs, the ideas conveyed by those words can be conveyed most clearly and certain

to the minds of those who may be spectators. And I think it is of great importance, when one is to speak in signs, to be sure beforehand what series of signs will best convey the idea of the speaker; and then to give those signs.

This may possibly be at variance with the custom of some who claim, perhaps, that they speak as naturally in signs, and as freely, as in speech. That may be true. But I still think that to speak clearly in the sign language requires some forethought, some reflection, and some arrangement. And the suggestion comes to me, whether it should be in accordance with the English order or not. I will say for myself that, without attempting to follow the English order closely, I do like to present my ideas in signs in an order which is not distorted and twisted from the English order; I like to follow it as nearly as I can without sacrificing grace and ease in the sign expression.

In reference to translating from speech into signs, in my own practice I have followed the rule of endeavoring there as in the other case to use those signs which will most clearly express the ideas which I wish to convey, without attempting to follow very closely either the order of words or even the order of sentences of the speaker.

During the past year I have been one Sunday in every month interpreting services in Washington City, in a church there, for a company of deaf-mutes that have been in the habit of attending. And I found at once when I began to perform that service that to give the interpretation clearly and well I should follow the speaker by an appreciable time; that is, that I should hear what he had to say, and should keep up my line of thoughts, expressed in signs at an appreciable distance behind him in point of time, that I might have an opportunity of carrying on a mental process sufficient to convert his ideas clearly into signs, without attempting to follow closely the order of his expression.

With reference to the translation of the sign language into speech, my experience has been that the difficulty which is encountered there depends very much on the way in which the sign speaker uses the sign language. It has been my experience that if the sign speaker has been clear in his utterances that it is not a matter of the greatest difficulty to translate those utterances into speech. My general experience is that it is a very difficult matter to translate the ideas of one who is speaking by signs into speech. But I think this arises in a very great degree from carelessness; sometimes from a lack of precision and absolute clearness in the signs of the speech itself. And I think that if those qualities were cultivated that the translation from sign speech into oral speech would be less difficult than we often find it to be.

I would like to say just a single word to the teachers of the deaf here, simply in reference to the efforts which ought to be made to maintain and to hold the sign language in what we may call a pure state. I mean by that to make earnest effort to have a thorough and full command of what may be termed the sign language. That, I admit, is a somewhat indefinite expression. I cannot say definitely what the sign language includes. It may include more or it may include less; but my own idea of the language of signs is, that it enables us as speakers to the deaf to convey our ideas clearly and satisfactorily, and in a manner which shall be interesting to the minds of deaf persons.

To preserve the sign language in its purity, we must depend upon

those whom we have reason to believe know it in its purity; and we must imitate them. If there is in an institution one teacher who is known to be a clear sign maker, he must be studied and deferred to by the others. The sign language can be kept in its purity only by a decided effort to use it clearly and to use it fluently. I have seen sign makers who, it seemed to me, were very careless in their signs. I have not seen any here in California since I have been here, of course, as our interpreters have all been graceful and clear in their sign making. But I have seen sign makers who seemed to be careless, and who might improve. It is a matter almost like letter writing. A sign maker can be very indistinct and imperfect; or, on the other hand, if he gives thought to what he is doing, he may express himself in signs with clearness, without repetition, and in a manner interesting and entertaining to those who see him speak.

I have in my mind now some of the masters of the sign language, as I recollect them; some of the men who are passing off the sphere of action. I remember the Rev. Mr. Turner, formerly Principal at Hartford. He used to come, in our early years, to Washington, and lecture to our students there. I remember one lecture given by him, especially—the most entertaining one at which I was ever present. He was clear, distinct, and full in all that he undertook to say. And from that time to this I have felt this power worthy of serious and earnest cultivation.

I was asked a little while ago by a deaf teacher, if a dictionary of signs could be written. I doubt it. Dictionaries of signs have been written; but as to the question, could one be written which would be very useful in translating the sign language, I shall have to answer, I doubt it. I think the language must be preserved by its being taught by one who uses it well to others who desire to use it well.

MR. HENRY WHITE, of Utah: Personally, I am as much opposed to the use of signs as any one; I am a pure oralist. Signs do not have any influence upon the mistakes of deaf-mutes. Signs sometimes help and sometimes do not help deaf-mutes. If a class could get along without signs, I would be glad not to use them. But that cannot be done. When I lost my hearing, before I went to the institution, I had made signs, but without any definite system at all. When I came to the institution, I could not have gotten ideas if the teachers had only spelled or written, but I had to get ideas through the signs. Signs are necessary to the conveying of ideas, and if you try to get along without them, you lose a great deal of time.

I have been to two schools; one where signs were made, and one where they were not—to the Hartford institution, and Horace Mann school in Boston. It is more natural for the deaf child to think in signs. Out of school they will make natural signs. They will use signs describing things that they see. Under the influence of teachers, who use signs, they make much better and correct signs. We have had a very interesting explanation, by Dr. Peet, of why he makes the sign for the horse, and the sign for the horse, and the sign for the horse. I think that is very important.

I never shall
lesson that I
College in the
interests

first I received the first
ever had lessons in Yale
Latin, or German, that
of half an hour, that

initial signs. I have lately caught several of these slang signs to which Professor Ely has just referred. I agree with Dr. Gallaudet that the signs should be arranged and kept systematically. I think that we should adhere to some particular signs, and that the teacher should criticise the pupils for their use of any other signs. A variety of signs confuses the deaf-mute.

Here the section adjourned until to-morrow, at nine o'clock A. M.

TUESDAY, JULY 20, 1886.

MORNING SESSION—NORMAL SECTION.

MR. ELY in the chair calls the meeting to order.

Prayer was then offered by REV. DR. GALLAUDET.

THE CHAIRMAN: The subject of this morning's session is "Instruction in Art." This section will be led by Mrs. A. J. Griffith, of Illinois.

MRS. GRIFFITH: We who are engaged in the work of this department congratulate ourselves and the class for which we labor that the time has come when art is considered so important a factor in the instruction of deaf-mutes as to be allowed a portion of the valuable time of this convention. Our object is to consider the best methods of imparting this knowledge to make it of greatest practical value. The question for the hour is, "What to do and how to do it." Our worthy Chairman suggested "experience as of more value than theory." My twelve years of teaching have been so many years of experiments, having no preconceived theories to maintain. We follow no rigid rules of instruction; as tastes and talents differ the method differs. We give elementary instruction in the different school-rooms to those pupils who have been in schools over three years, a fifteen-minute lesson once a week, consisting of lines, straight and curved, angles, squares, and a few geometric forms—teaching them the names of lines and angles—the first original design, as they advance. In this way the whole school gets the instruction in drawing, and it also affords an opportunity to find those who have a special talent for this work, who are then placed in classes occupying from one to two hours a day, so arranged as to least interfere with their school work. They study model and cast drawing in charcoal and crayon, rapid sketching from life and nature, application of design in clay modeling and wood carving, crayon portrait work, and oil and water color.

MRS. GRIFFITH (after the reading of paper): Miss Eleanor Patten, one of our pupils, will give an illustration of her mode of teaching.

MISS PATTEN (a deaf-mute speaking through an interpreter): The first step is a straight vertical line. I ask the pupils the name of that line, and teach it to them. Then I cause them to commit it to memory; have them all stand up around the large slates and draw vertical lines as nearly as possible with a ruler. At first they get it crooked, but after practice they get a neat straight line.

The second step is to make the same thing without a ruler. I have made a great many of them for practice. I give the direction

to draw a vertical line, or so many vertical lines, without the ruler. I show them their mistakes and correct them.

The third step is to make a horizontal line, with a ruler first, and then without a ruler, following the same plan as was used with the vertical line instruction.

The next step is to teach the child how to measure by inches—one, two, three, and so forth—with the ruler. After this is learned I give them directions to draw a vertical line so many inches long, first with a ruler and then without it. After repeated corrections, they learn to draw very well without the ruler, according to the directions.

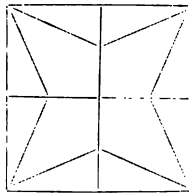
The next step is to draw a square with the ruler several times, until they can get it square with a ruler; and then to draw them without the aid of a ruler. Then they make the diameters of the square, and then the diagonals of the square, and so on. That includes the first year.

MRS. GRIFFITH: These exercises come once a week. We have a writing teacher who gives instructions in writing fifteen minutes every day in the different school-rooms, excepting Wednesday, and this work comes on Wednesday.

DR. PEET: Does all of this drawing exercise come upon one day in the week?

MRS. GRIFFITH: Yes, sir; Wednesday for the whole school. This elementary work, but fifteen minutes at a time.

MISS PATTEN: The second year they begin figures similar to this:



They make lines across the center of the diameter or square first, and then make the other lines within the square. Then I divide that up into smaller squares, putting figures into it, forming designs in the square. Finally they draw quite complicated designs the second year. I often draw in one of these small squares a pattern myself, and require the filling in of the other squares without my aid; and by and by they become so proficient that they can make these patterns themselves without a teacher.

The third year I begin curved lines; first a circle, and the diameter of the arc of a circle, and so on. And I also use curved lines in the square in the manner that I have already indicated. I require them to draw many patterns of that kind, using the curved lines, and I require them to originate them.

The fourth year I begin triangles, right angles, and so on. Then I continue that in that way until I have by that time discovered those who have peculiar talent for drawing. [Applause.]

MISS BESSIE EGGLESTON: How do you teach drawing circles and curves?

MRS. GRIFFITH: We first begin with a square, and then draw a circle in it with freehand. After this year's work we use no more measures, and no rule.

Miss Mary Peek, who assists in drawing from casts and models, will now give an illustration of her work. Miss Peek has been a pupil of ours, and is now a teacher.

[Miss Mary Peek and Theodore d'Estrella gave an example upon the board of drawing from objects, which were received with applause.]

DR. PEET: Is this slate work done in a class?

DR. GILLET: No, sir; it is done on paper; a class of fifteen or twenty at a time drawing from the same models and different points of view, and the teacher illustrates it on the blackboard.

MRS. GRIFFITH: This work we do on the blackboard with charcoal and crayon. The elementary work is all done on a slate until perhaps the last month in the year, and then we have a paper something of the size of a commercial note sheet, that we have the pupils use with a pencil, and we save these papers, and, at the end of the year, looking over them we find that some of them show talent, and the best of them are selected, and the pupil is taken into a special class.

MR. GILLESPIE: At what year do you introduce this drawing from model?

MRS. GRIFFITH: That depends on the expertness of the pupil. Right at once, if we feel that they are able to go at it. We begin with drawing a cone at first, and we keep the pupils on that until we find they are able to go on further.

DR. PEET: Is this a part of the fifteen-minute exercise?

MRS. GRIFFITH: No, sir. Miss Patten carried us as far as we go in the fifteen-minute exercise. Then, after that, they are brought up into the several classes, where we teach them from one to two hours a day; one hour, perhaps, for two or three years, unless we see that they are going to make something of it after they leave us, and then we give them two hours daily.

DR. PEET: How large a proportion do you so promote?

MRS. GRIFFITH: We take all pupils for the three years, and give them this elementary drawing, and we have about sixty pupils out of the three hundred in the special class.

MR. GILLESPIE: When do you let them commence to make pictures?

MRS. GRIFFITH: We keep them for two or three years just drawing from models and from casts. We allow them to shade in the second year of the special work—that would be the fifth year—if we feel that they can make a success of it. We are governed altogether by the apparent progress the pupils make. We have no rigid rules about it. We have the fifteen-minute exercises, for all the pupils in the school that have been there over two years, in their class-room.

For the last two years we have carried on wood engraving very successfully, and we have here some specimens of it. First, the pattern is drawn on paper, and then modeled in clay, and then carved in the wood. The frame I show you is engraved out of cedar. The face in the frame was modeled by one of our pupils, first in clay, to the sitting of one of the pupils, and is a very truthful likeness. Then it was cast in plaster. Mr. Rogers made the portrait, which I show you. Miss Gallagher had charge of that department, and she will now give us some thoughts upon the subject.

MISS GALLAGHER: Wood carving is supposed to be the branch of art. Probably the best 'non was a club. decoration was some carving

for a foundation a good knowledge of drawing and an intelligent idea of modeling. It has been dignified by the diligent application and serious thought of some of the best artists the world has ever known. * * * Of the ancient carvers the Egyptians stand first. On account of this being a comparatively new branch of work among the deaf and dumb, I had written in this paper a short historical sketch of wood carving—merely to show to what an extent the art had been carried by the ancients—but the time is so limited that I will only mention one statue, which is Egyptian, that was discovered by Mariette, during his excavations at Sakkarab. It is of wood, and attributed to the early period of the old kingdom of Memphis. This is, probably, the oldest statue in existence, and is now in the museum at Boulaz. The wood used by the ancients was usually sycamore, cedar, cypress, walnut, and ebony, were often inlaid with ivory, agates, hammered silver, etc., and in South Kensington Museum are beautiful specimens of this work.

Most ethnographical collections have carvings from different countries—Greece, Germany, France, Mexico, New Zealand, Polynesia, Persia, Japan, China, Spain, and Switzerland being represented. These references are sufficient to show that this subject has been practically studied, from the reign of Menes to the present time, and we will leave these countries—ancient Greece, artistic Italy, substantial Germany, extravagant France, and industrious Switzerland—to see what the possibilities are for America in this branch of art, and more particularly what benefit it may be to the deaf and dumb in this country. We know there is a demand for it. Our handsomely furnished city houses to-day are no more complete without their carved furniture, newel posts, etc., than they would be without a piano, library, or fireplace, with brass andirons, in the hall. They are ceasing to be luxuries and growing more, each year, to be necessities.

When our country was discovered there was no demand for deaf and dumb institutions, sleeping cars, or carved tables. But soon deaf and dumb institutions were necessary and a Dr. Gallaudet was found; sleeping cars were needed and introduced. Other luxuries are fast becoming necessities, and some one will reap the benefit. Why should not the deaf and dumb have an opportunity to do it?

It has been said, "Industrial products are unlike bread, of which enough is enough." Of industrial products we want all we know of, all we have heard of, as fast as invented. Alexander the Great never craved a watch, or our great grandmother a sewing machine, because there were none; but times have changed since then, and instead of nineteen out of twenty men being farmers, as was the case a hundred years ago, the proportion of farmers has decreased as steadily as the number engaged in industrial pursuits has increased. Showing, again, "enough bread is enough."

The demand for skilled labor cannot be made more prominent, I think, than by calling attention to the manual training schools which are being established all over the country. Some may think that if all children are to be taught the use of tools that the mutes cannot compete with them. While the standard of work will be raised it is not to be supposed that many boys or girls will excel in such branches as wood carving, without more lessons than they will receive in these manual training schools; or, if they should, all we have to do is to raise the standard again. There has always been found room up higher.

Our industries are waiting for more skill, and are willing to pay for it. There is no danger of skilled labor becoming common. Skill breeds diversity of employment and originality. There are a plenty of laborers in the country, but not many skilled, intelligent ones. As Colonel Jacobson says, a boy in Ireland will grow up to shovel and dig at \$1 a day. His son, born in Toledo, will learn to read and write, and, with some mechanical skill, will earn \$2 a day. *His* son may go to the Toledo Manual Training School and earn afterwards his \$3 to \$5 a day. Anaxagoras spoke well when he said, "Man was the wisest of animals, because he had hands;" and Bacon when he said, "Education is the cultivation of a legitimate familiarity betwixt the mind and things."

Our mutes have the advantage of most speaking children from the start, in that they are taught *drawing*, which is the key of *all* branches of art.

Give them first a good drilling from the object *always*. Then let them begin to design. Give them what we call the *principles*. Curved lines to elaborate. Always let them be warned of over ornamentation, by seeing how nature restricts her true ornaments, the flowers, and sprinkles them sparingly contrasted with the foliage. Try also to have the design suitable to the piece of furniture to be carved. Have most of the designs conventional (for one never wearies of a well executed conventional design) bringing in the realistic as sparingly as does nature her flowers. Remember as construction implies a purpose, utility must have the precedence of decoration.

Then let the pupil have enough skill with clay to model these designs. Of course no one can model in wood, that cannot in clay, a much more bidable medium. You may draw very well a design, but the same design modeled will be much more easily comprehended. In one case you have the shadow of the substance, in the other the substance of the shadow.

In the wood carving schools in Nuremberg the students are expected to model in clay exclusively for half a year. After the drawing and modeling are mastered well enough for our purpose, take a well seasoned panel of wood, walnut, oak, cherry, mahogany, or any hard wood. Take first some simple design, say half a diamond; take your skew chisel firmly in your left hand, place it directly on your line, inclining it outwardly, so when you hammer with the mallet, which you have taken in your right hand, there will be a clean beveled edge cut. Do this on two sides of the design, place the tool obliquely on the third side, and remove the wood between the two incisions, and your design is finished. Repeat this many times till you can cut each side with one stroke, and finish with one more, and leave your edges smooth and clean. In no profession does cleanliness stand nearer godliness than in wood carving.

When you have mastered this and a few more simple patterns, take a more elaborate conventional design, treating it the same way. By degrees you can take up scroll and realistic designs.

If the mutes are taught this art they must understand it is work, not play; that if they make their five to six dollars a day they must do the work well. This is a progressive age, but philanthropists are not standing around on every corner offering big pay to inferior workmen because they have an infirmity. It costs too much "to make the wheels go round" to employ inexperienced workmen. But a person

who is a designer, cabinet maker, carver, and excels in these things, will be sought for, and paid *well*.

A designer and carver only stands high up on the pay roll, and our deaf boys and girls may as well stand there as any one else. I say girls, because girls wisely do not always stay within the limits men make for them, and in carving have been almost, if not quite as successful as men.

Almost all the fine furniture is carved more or less. Every large furniture store has its own designers and carvers, and the places are open to the *best*. This opens to our mutes an avenue long and broad; one, it seems to me, particularly adapted to them. One in which, with industry and perseverance, they can literally carve out for themselves an independent living and happy life.

MRS. GRIFFITH: I will ask Miss Jameson, of the Wisconsin institution, to give us some information as to her manner of teaching art.

DESIGNING.

MISS M. JAMESON: So much has been said in regard to manual labor as an element in the instruction of the deaf and dumb, and it is such an important branch of education, that I wish to present for your consideration a few facts in regard to designing, which is the first step in the direction of the more mechanical arts. To design is to arrange with definite mathematical proportions certain lines, figures, or conventional forms into a harmonious whole. In speaking of this subject, recently, Philip Gilbert Hamerton said: "The eye which is trained for drawing discerns form everywhere and in everything, and the hand which is skilled to use the pencil will be generally superior in delicacy and accuracy of touch to the hand which has never been taught. There are a thousand things to be done in ordinary life, in different trades and professions, in which accurate sight and sure touch are desirable; so that a branch of education which gives these has so much more in its favor."

There are three things, therefore, that are absolutely necessary to insure success: First, a trained mind to remember form; second, a trained eye to observe it; third, a trained hand to execute and obey the mind.

But a question immediately suggests itself, what is the best way to accomplish this training, especially in a child? While we have in view the ultimate purpose of giving him a thorough knowledge of art principles, we have also in view the general discipline of his powers, and a method which will at once teach him to plan, to observe, and to execute, is in all respects the best one for our use. We think we have found designing to accomplish our ends.

To gain any degree of skill in any kind of work much more practice in fundamental principles is necessary than a child is willing to give, be he deaf and dumb or possessed of

MORE THAN ORDINARY FACULTIES.

It is true some are born skillful, and some achieve skill, but by far the greater part are of ordinary capacity and have skill thrust upon them by the unwearying efforts of a careful teacher, who is usually limited for time. With twenty pupils and twenty minutes a day, how can she accomplish it? My method has been simple, perhaps faulty;

still let us give it a critical study and see how it answers the purpose. Beginning with the drawing of straight lines, perpendicular, and horizontal upon the blackboard; in the practice of which a perfect square, without rule or measure, is the first step. Every child can draw a square. Oh, but can he? He will do it a great many times before it is a perfect square. Thorough drill in measurement by the eye is necessary, and the child who can accomplish it without work is a genius. When he can draw it unfailingly his eye has begun its training. This square is taken as a foundation, and it is divided into different parts as the will of the designer dictates. These lines are traced and upon them the completed design in whiter chalk stands out. First simple geometrical figures are made, but the object of the teacher will be lost if only the conventional idea remains with the pupil. The observation and recognition of form is the aim, and this must not be lost sight of. As the hand becomes accustomed to drawing on such a large scale, step by step the lessons introduce parallel lines, curved lines, circles, and an infinite variety of forms such as we can always find in wall paper, oilcloth, and carpets, however, illustrating frequently by objects in and near the studio which are *not* artificial.

To do this the hand must, of necessity, have a great deal of practice; in fact, it receives its training in accuracy while following the design which the mind has previously formed. These exercises must be varied by original work, in which every child having a uniform foundation to begin upon, follows out some idea of his own, which in a short time he will be able to do; though at first he will only try to improve upon his teacher's work, which shows that at least his mind is at work grasping the idea of remembering form. It will be crude and unsatisfactory work at first, but by pointing out and suggesting forms the progress is made.

This method, while keeping the attention fixed upon the new design, gives the eye an admirable drill in measurement, and the hand is actively employed in drawing, again and again, a few simple lines, arranged in all possible positions, so that remarkable accuracy is obtained, as well as a breadth which the child will never forget. Designing awakens the faculty of observation, and teaches the wondering pupil that there is form everywhere, while it inspires him not only to imitate old form, but to create new for himself. When a certain degree of proficiency has been attained, natural forms should be substituted, for nothing is so undesirable as any cut-and-dried diagram work for children. Still, with the deaf and dumb, it is necessary to follow a method, for they are not like other children, and in the multiplicity of a confusion of ideas, they are apt to lose sight of the object in view. With their memory drawing I have sometimes been amused, for the form of their spoons and forks, as well as plates, have been woven into these designs. In a school where technical instruction is given with a view to practical application, designing may be carried on indefinitely; and as a foundation for wood carving and carpentering, as well as architecture, it is indispensable.

Too much stress cannot be laid upon the necessity of throwing the pupil upon his own resources. No helps of any kind should ever be allowed, for to use them will still the vigor of the young hand; and a child who becomes dependent upon copies and measures, will never be able to do without them. This applies to the general study

of art, as well as to the common application of art principles in manual labor.

MISS M. JAMESON (after reading the paper): I will give the outline of the work that is carried on in my school, and, also, some points which have given me a great deal of help in practicing with my children.

The Delevan Art School was established about three years ago, and out of the whole number of pupils in the school—two hundred—one hundred and twenty-five are regularly and systematically taught drawing. We have about one hundred pupils in the lower grades, and about twenty-five could be called advanced pupils, though they are not more than thirteen to fifteen years of age. If they stay as long as eight years we sometimes give them work in water colors and in oil colors. Of these we have had a few, but very few. In our lower grades the work is almost wholly limited to blackboard work and freehand drawing. They are taught to draw first simple designs; then the work from objects, limited to blackboard work, without being allowed the use of a ruler, or any measure of any kind. It is wholly freehand, and they are taught in the first place to measure from the eye wholly.

In the advanced work the children are taught first the simplest forms of designing, and then they go through designing from object drawing, perhaps in charcoal, or perhaps in crayon, and are advanced from crayon drawing, as the teacher sees fit. The work is fitted to the individual needs of the pupils.

There are four points which I have found of great help in my work with young children, and the first is perspective. In some of the eastern schools I have understood they do not pay much attention to perspective, saying that it is unnecessary, and that it is very hard to explain the principle. I find that the explanation of principle is unnecessary with the deaf and dumb; that by showing and giving them illustrations they can very easily be taught so that they can put these principles in practice, and not have anything to do with the explanation of rules. I have my pupils draw pictures of objects with which they are very familiar, for instance, the cheese factory which stands very near the institution, and they are required to draw that with exaggerated perspective, so that they can see for themselves in a very short time the axiom that the nearer objects are to your eye the larger they become.

Then the second point is the matter of class criticism. Children are very certain to learn a great deal quicker from being able to criticise the mistakes of others, than to have the criticisms of the teacher alone. I criticise all the work of my pupils before the class, but generally, as a class stands around the room, stop on one lesson, and each correct the lesson of the next scholar. In that way they gain a great deal.

The third point is drawing from memory. Deaf mutes are so limited in their means of communication with outsiders that if they can gain a rapid means of communication it is a great help to them. I try to have all of my pupils remember what they see when they go outside the school. One of my exercises is to come before the class with something which has been seen outside.

The fourth point is the public exhibition of work. I think that is one of the greatest helps that we have found in our school, to have all, or portions of all, the work that has been done during the year shown at the close of the year. I do not think it is a good plan,

make particular preparation for exhibition by having work done towards the last of the year for exhibition. I think the children should be made to understand that work taken from their lessons, from time to time, will be before the public.

Every Superintendent, I presume, finds great difficulty in arranging for a special time for the special pupils who come out of the class to be put into extra classes—the special classes, we call them. It seems as though some arrangement could be made by which teachers might have more of these special classes. We are all of us very much troubled to find time for these advanced pupils who are brighter, and ought not to be kept back with the lazy ones. Perhaps some one could make a suggestion as to how that could be accomplished.

DR. GILLET: We sacrifice the shops to that.

DR. PEET: I think that is legitimate, because they are connected—both relating to manual skill.

MADAME LE PRINCE, of New York, then read the following paper, which was received with applause:

Mr. Ely's questions are, "When shall we begin in art training? What shall we undertake first? What direction shall be given to pupils' work, and how much shall we expect of them?"

May I reply to these questions by discussing another?

TECHNICAL ART TRAINING.

The study of technical art is, or should be, the foundation of the industrial arts. Sound drawing is, or should be, the foundation of technical art. By the term technical art, I would include not only a knowledge of the various mediums, colors, process, etc., used in the industrial arts, but also a careful and intelligent study of the best, or copies of the best, works produced by leading artists and artisans from ancient to modern times. This knowledge is to the art teacher, student, or would be skilled artisan, precisely what the study of ancient and modern classics is to the writer, historian, or poet. It provides safe models for those who can but copy, suggests adaptations without limit to the more gifted, and chastens and ennobles the original design and invention of the few.

How can we best attain this knowledge and transmit it to our pupils? What is the condition of our art libraries for the deaf, as regards practical text-books and examples of art applied to industry? Again, is it not our duty as art teachers to become acquainted with the art treasures and their owners within a reasonable range of our studios, and to seize every opportunity to obtain permission for our pupils to visit public, private, or trade collections, or exhibitions of artistic work?

Art practiced as it is in our institutions would prove not only a valuable addition to the education of the deaf, but a successful lever in winning for them public recognition.

Thanks to the efforts of the last twenty years, the educational department of the deaf has awakened to the value of art training, and every step in advance taken has been well served, and if successful, or likely to be so.

Until recently, the deaf had not grasped the value and practical importance of art training, but it has classed it as a necessary part of the education, or as an accessory to the main work.

ment for young ladies in fashionable boarding schools, or, at the best, connected talent for drawing with special genius, and accorded to it but *one* career—that of the artist.

I believe the rapid change in public opinion in reference to the artist's profession, socially and pecuniarily, to be a foreshadowing of the increased consideration and respect about to be shown to sound drawing, not only as a means of education, but of practical utility in after life.

To help achieve this, we art teachers must rid our minds of ethics and sentiment, and lovely words and ideas about art, and teach our pupils to be precise and swift in execution, true to nature, and obedient to the broad principles of art which forbid beauty to trench on utility.

It is so far from being *true* that art leads to but one career—the artist's—that in nine of ten trades or professions drawing in some form or other is a necessity or a help. I do not believe it would be a hindrance to the tenth.

America is justly proud of her national schools, and colleges, and institutions, and will not lag behind, but strive to surpass other nations. The science, or rather its practical application, in our day schools, is new, good teachers are few, and, true to her unmatched mechanical instincts, America seeks a "system." I believe we are here to-day to seek and find a "system" adapted to the capacities of deaf-mutes, but I fear all search after a perfect system will end like that after the philosopher's stone. I believe the most admirable quality of a "system" to be its elasticity. May I quote the words of a teacher who is an ornament to your profession, Miss Ida Montgomery, mistress of our New York institution's high class for girls? "When I *commenced* teaching I knew a great deal; I had lovely theories; I had observed deaf-mutes *profoundly*, and elaborated a wonderful system for their education; I could have read you a paper *then*—but *now*, alas! twenty-one years of the school-room have knocked my theories into cocked hats, and my 'system' went to pieces long ago, like the 'deacon's one-horse shay.' One road, straight, and broad, is open to us, and I *know* that success lies in it. Let us learn '*to see*,' and teach '*seeing*' to our young pupils."

A child draws by instinct; he can draw, and loves to draw, long before he can write, or has the slightest desire to write. How are we developing this instinct? An American guide book to public school teaching (or teachers) recommends simple geometric outlines for first practice, on the plea that these are a correct basis for further development. Would a teacher of English be considered reasonable if she gave her babies Greek and Latin roots to learn because they are the foundation of the English language? The same book bids the teacher have beginners spell first the names of *familiar* objects, and advises the use of familiar illustrations to assist the mind in its first struggle with the difficulties of arithmetic. Is this quite logical, or fair? Why in this matter of drawing should we confine our children's tender fancy and quick imagination within geometric limits? Why throw away the wealth of aid in teaching that pictorial drawing affords?

I am aware that if a child loves his teacher well enough, he can be made to attack valiantly a whole army of triangles, pentagons, hexagons, etc., right on to ellipses with transverse and conjugate diameters. But is it well for the child, at its freshest, most eager, and

receptive age, to be chilled by such barebones of art? I believe there is a better, because more natural and less abstract way. Carry real things into your class-room; an egg, for example. Call attention to the beauty and smoothness of its unbroken curve; hold it between your children and the daylight; then in front of a darker background, that they may see for themselves how a change in the condition of its surroundings varies the play of light and shade on its surface. Then let your children watch you draw an egg—background, foreground, light, shadow, and reflected light [illustration by charcoal and white chalk on slate], the larger the better, call it an ostrich's egg if you like; never mind about construction lines and their long, hard names. Now, give your children charcoal and white chalk and let them try. In ten minutes, that is when they have discovered for themselves the difficulty of drawing without construction lines, attract the attention of group after group and explain to them your practical working methods. Amuse your children while instructing them. If you find a child in despair over an egg quite too shaky in outline, break it even a little more for him, and make a tiny head peep out from the breakage; little feet, too, if need be, and your pupil's face will change from despair to delight. Now, make use of your constructive methods for an ellipse, by fitting a bird's nest in a tree branch. Draw your lines upwards, downwards, across, and respectively. Hold up a cup, or some such hollow vessel, and call attention to the perspective changes occurring as height and position vary, and to *how* lights and shadows fall on rounded hollow bodies. Mark strongly, in black and white, on your drawing of a nest, these facts of appearance in nature, not forgetting little twigs, and bits of moss, and tiny eggs, and, if you have time, a mother bird watching—then leave your little ones to do as much as they can. It is all the better if you can bring to your lesson a real nest, with real eggs. Let a lesson in clay work, on same subject, follow this study of light and shade and facts in nature; and at a third lesson, if you can procure them, give cheap outline wood cuts of similar subjects to your children to tint in water color. (It is a good way in which to use up old time drawing books.) Give warm praise to those who use soft, well blending tints, and have not overrun the given lines. Tell them which colors best set off other colors, and give practical illustration of your color theories by means of colored chalks or pretty ribbons. I am far from having measured the *possibilities* of this kind of teaching, but so far the results have startled me, and confirmed my impression that mere outlines are to drawing as shorthand to writing, good when one *knows*. When a child looks at an object he does not see "outlines," he sees masses of light and shade; why strive to teach him art in the abstract, instead of training eye and hand to reproduce the *things he sees as he sees them*, and his heart to take in *to the full* these beauties in appearance. Geometric drawing cannot do this, and should come in later.

Our institutions for the deaf afford special facilities by large slates, and unlimited white chalk; these, with charcoal, clay, a few non-poisonous water colors and camel's hair brushes, with a plenty of knowledge and energy on the teacher's side, should suffice for primary classes. On entering the New York school I found a tendency to produce caricatures that varied only in the measure of ugliness. You will agree with me that this should be put down, and our pupils taught that caricatures lacking elements of truth and beauty are

art as sin to morals. Passing from primary to succeeding classes, I have found the cross-grained French charcoal paper and charcoal to be best adapted to study from the "round;" geometric solids, Greek vases, etc., together with familiar objects taken from house and workshops. It is needful to vary this work by giving out words for original illustration in pen and ink. Charcoal permits breadth and freedom in handling and for erasure; original sketches in pen and ink necessitate forethought and precision. We use lithograph copies in our class-room to but one end; it is this, that in case of failure, or over-confidence, our pupils may *compare* their own productions with those of better men. We do not permit the copying of lithographs, believing that such copying adds no more to a pupil's knowledge than the mere copying of a poet's handwriting would enable one to appreciate his poetry. May I speak even more strongly? I believe this copying of lithographs to be a positive evil, twofold; it helps to propagate false and impractical notions of art, and becomes mere food for vanity on the part of pupils and parents—and, if I dared, I would say Superintendents of deaf-mute institutions! Better no art at all than a false, demoralizing art.

From out our second grade of pupils we pass the apparently gifted into a "special testing or training class," previous to admitting them into our "working studios" for boys and for girls. In these studios we teach art-crafts during workshop hours. We have but one *mixed* class; it is our life class, and so far has been the most serious. We are scarcely ripe for it, but it is an excellent corrective. It gives to those considered by themselves and companions as rather above the average "smartness," a vivid sense of no success without earnest effort, and leaves them sobered and strengthened. So far it has been well with us as a young studio, and comparatively, but you and I and all art teachers of to-day have a problem to solve. It is this: How best to make art enhance the value of mercantile produce. Were I quite American I should put it this way: How can America keep within her shores the immense sums she spends yearly on foreign art produce? By giving to her children and artisans practical art culture. Carlyle says, "Your America is here or nowhere." Do the duty which lies nearest thee, which thou knowest to be a duty; thy second duty will already have become clearer. Let us then study *first* our workshop needs. If our art departments do not become a power for good in these, they have failed in their mission.

On entering the New York school I fitted my art department to existing conditions of class organization till I should gain experience in deaf-mute teaching, and earn the confidence of my Directors and Principal. Next term I have Dr. Peet's consent to grade my drawing pupils according to their trades, and here lies the pith of the matter. It is not so much *fine art* as art applied to industry deaf-mute institutions require. We need just that kind of art training which will make of a good shoemaker a better shoemaker, and of our carpenters, cabinet makers, and carvers, printers, and tailors, more expert and precise workmen.

The drawing of lilies and roses may, probably will, enable a shoemaker to place his stitches more evenly; but the modeling of lasts to measure, and careful drawing of the shapes and sizes used in his trade, and a fair knowledge of the mechanism of the human foot would help him better.

We need in our studios good light and good humor, any amount of

good casts and examples, order, and that economy in choice of material which proves to be best in the long run. We need the vigor, discipline, and variety that comes of facing squarely nature, art, and the needs of manufacture.

The New Orleans and American Institute exhibits have helped to prove that in this field of art education there is no distinction between the deaf and hearing children; they awarded "distinction" to the deaf. Would it not be false kindness to our pupils to exact of them *less* than from hearing speakers, seeing that in after life they must do good work more swiftly and cheaply than hearing competitors, if they would win in the race of life.

DR. GILLETT: How soon would you introduce such an exercise as you have given first; that is, the egg?

MADAME LE PRINCE: As soon as the child enters the school. I think the more natural the system with little children, the better.

DR. GILLETT: You reject entirely geometrical drawing.

MADAME LE PRINCE: At first. I think geometry is a matter of reason, and should come in with the reason.

DR. GILLETT: Have you any particular time when you commence geometrical instruction?

MADAME LE PRINCE: When the children leave the primary classes, and Dr. Peet thinks they are fit to rise higher in the scale of instruction, according to our present organization, then I put them into the special classes. I commence teaching our pupils drawing as soon as I can, the first day they enter school. The most successful thing we have had in our school was a commencement exercise in which a drawing bigger than herself was made by a child five or six years old.

MR. WALKER: What time is given to your work with your first pupils?

MADAME LE PRINCE: Dr. Peet gives me for each pupil one hour a week for primary drawing. Those who are put into the higher classes, receive one hour a week more. As soon as they pass into the working studios, they have workshop hours. We teach one hour a week for each class, which means an hour for each pupil; one hundred and sixty pupils once a week.

DR. I. L. PEET: I will explain that in our lip reading hour, the fourth hour of the morning, and of the afternoon, we take one hour a week from each class for drawing. Madame Le Prince has a room especially for class instruction, and each class is assigned a day in each week, always, at eleven o'clock. They come to her in this room, and she teaches them for one hour a week. It is utterly impossible for her to go through so many classes with simply one hour a week, and she gives two hours of instructions a day to the classes, one hour in the morning and one in the afternoon. The next week the teacher of the class repeats the exercise which Madame Le Prince gave the week before, so that the lesson is practically repeated. And our instructors are so much interested in this matter of art that they take a lesson from Madame Le Prince themselves once a week, every Monday afternoon for an hour after school, and they all learn the principles of drawing, so that they can impart them to their classes. The teachers are willing to do this, because they feel as if it was exceeding important to the deaf and dumb to learn drawing; and they feel great pride in their own classes, and are willing and anxious to assist them.

DR. GILLETT: Then each pupil has Madame Le Prince's instruction one hour each two weeks.

DR. PEET: Yes, sir; but has a drawing lesson one hour each week. [Applause.]

MR. ELMENDORF: I should like to ask Madame Le Prince, how many pupils she has had all in one class.

MADAME LE PRINCE: Just as many as I can attend to. They vary from nine to thirty-two.

MR. ELMENDORF: How many should you like to have?

MADAME LE PRINCE: As few as possible.

MR. ELMENDORF: In the few remarks I wished to make, Miss Jameson has stolen all of my thunder. I approve of her method, which is exactly the one that I follow in every respect, and I agree with her exactly. I think it has had admirable results. I should go first to the little ones with objects. I think I am to speak on mechanical drawing—drawing, as applied to the industries, and the results shown.

I have had a great deal of experience in obtaining positions for some of our boys, and I have been astonished at the ease with which I could obtain a position for a boy who could sit down, and, for instance, draw a cup leaning toward him, like this. [Showing.] I have also had one man who wished to employ a boy, take out his watch, and tell him to draw it in a certain position, and then in another position. It is our duty to teach a pupil that there is a difference between a watch held in one position and one in another. I teach my pupils to draw a table, for instance, in its different positions. I do not teach them the art of perspective. What is the use? I simply take a table and show it to them in one position, and then tip it a little, and thus show them the table in its different positions, and, finally, they become accustomed to seeing things reduced to a level, and in that way make very rapid progress. Don't take pictures, and don't ever put your pencil on a scholar's drawing. [Applause.] If you do, you have taken away the open sesame for that child. It is something for that child to take up a picture, and when asked, "Did you draw that?" to answer, "Yes, sir; a part of it." "Who drew it?" "My teacher." I believe the deaf-mutes are the most honest set of children I ever saw. [Applause.] I believe there is nothing they wish to deceive in, and particularly about their own work. I have seen children take up drawings and paintings, and throw them down with that expression. I have also seen them come to me and say to me, "I did that." And they were just as proud of it as if it was the finest in the land. Why? Because their own hands did it. You may ask, how can I correct them? Suppose a boy brings me a drawing of this table. I say, "That is wrong; look at the table, and draw it the best you can." He draws it again, and then I say, "Try it again." And that boy will try; he knows I will not touch his paper, and he will try and try; and sometimes he will succeed, and sometimes not. Sometimes I have to show him on my hand, and he looks at his drawing and sees where the mistake is. I chalk it right in my hand, and allow him to look at it but a second; and he takes my idea and works it out himself. My pencil does not go on his paper.

When it comes to shading the same plan is followed out. If he is drawing an egg, he may get the shadow right where the high light ought to be. I tell him, "You have got everything upside down; that won't do." He thinks it is very strange. I simply chalk it on my hand just to show him where is the light, and where the shadow, and then I rub it off my hand.

Coming to mechanical drawing, I shall leave out entirely what I

call designing, as the method shown by Miss Jameson is exactly the method I follow. I would like to add, that in the classes I have—from eighteen to twenty in the highest class, twelve to fourteen in the second, and about ten in the third—I have nothing to do with either water or oil colors. I am simply working for an end in a different way. The artistic point of view, as in coloring, I have nothing to do with. I am simply trying to give them an idea of form, measuring with the eye, or the delicate handling of their fingers, so that afterwards if they have to make a line drawing without measurements they would be able to do it with instruction from their master, or their "boss," as they call it. Take, for instance, this designing. Twice a week I have a class one hour at a time—on Tuesdays and Thursdays. They bring me from one to five designs drawn on common manilla paper, original designs drawn in pencil. On Monday morning they bring me three chosen designs that I have chosen, from all those drawn, in ink, without ruler, without measure, and without compass; simply freehand drawing in ink. Those I keep. At the end of the year I take all of these ink drawings and spread them along the wall with pins, and ask the children to go and choose the design which they think is the best design for an oilcloth, or which they think would be a fine design for a frieze, or which for a book cover border, skiver, or anything that I happen to think of at the time. And they choose their own designs from all of those that have been drawn by everybody. Then I say, "Work that up into a book cover border, or multiply it." The drawings are generally four inches by four inches, and I have them work it up so as to make it ten by twelve, so that it will make a square foot of design on brown manilla paper, to see if it will work into a working design.

Then, to go on with mechanical drawing, I simply begin by teaching them to draw a straight line with the ruler. I have not yet seen a child in our school that could do it. It takes at least a month to draw a line to satisfy me, even with a ruler. In the first place they do not know how to sharpen their pencils, and it takes me a week to teach them that without breaking it or wasting time. They must learn to prepare their tools, because when they get into work, a workman is known by his tools. When they get to work they must have perfect working tools, and keep them in perfect order. An employer looks at a boy, and sees his tools, and says, "I will take that boy," right away. And this is my experience that I am relating now. Their pencils must be kept in perfect order. A pencil, a six-eighths artist's pencil, a little compass, a straight edge, a T square, a drawing board, and a triangle. That is all we use. Begin by teaching them the proper use of those tools, how to hold the pencil for different purposes, how to keep that pencil sharp with a needle point or a flat edge for certain purposes, and then teach them to draw a straight line. You think it is a very easy thing to draw a straight line if you have a perfectly straight edge. But try it. The line must be mathematically straight. After they have drawn a clean straight line on brown manilla paper, I say, "Draw another exactly the same length, and do not use a measure." They attempt it, and some of them do pretty well after having had all of this preliminary training in designing, and so forth. "Now take your compass and measure." They measure, and they are very much surprised to find that they are not exactly of the same length. "Make them the same length." Then I give them horizontal lines, vertical lines, and perpendicular lines,

and then we go on with the different angles, the right angle, the acute, and the obtuse, triangles, squares, parallel lines, and so forth, in mechanical drawing.

What is this for? It is simply to give them absolute precision. For mechanical drawing the work must be exact. This mechanical drawing I bring into play in addition to this designing. In drawing frieze or oilcloth work everything has to be exact, and particularly for the photogravure process, a mechanical process which we have in New York, and which some of our boys seem peculiarly fitted for. I advocate the use of color in every school, particularly in common object drawing. Last year I obtained places for three different boys, one of them in the "Puck" office, New York. They seemed to treat me very coolly. I showed them his pen and ink mechanical drawings, and they said, "Yes, they are very good indeed; his hand is well trained, and he is exact, but we have no work for apprentices." I said to them, "I wish you would look at these just a moment. I know you use color," and I opened five or six common objects, one of which was a beet, and he said, "That changes the whole thing. We will take that boy." He said, "His hand is trained, and he has an idea of color and form." And those who are teaching drawing in our schools, to this practical end, will find it of invaluable benefit to the deaf-mute. I do not believe in knocking it into them, but those who have any talent at all they will be so well paid that you will never regret that you taught it in a practical way. [Applause.]

MR. MOSES: I think the last speaker has struck a practical note in this matter, when he has told us of the positions he has secured for pupils. I desire to ask him how long he has been turning out graduates from this school in this way.

MR. ELMENDORF: I do not know, as I have only been there four years. But since I have been there they have been graduating boys in this way, and we have found positions for several boys. He had been in training in this branch only for about six months. It is a comparatively new thing in our school; it has not been over six or eight years that particular designing and industrial drawing has been used there, as far as I know. I only speak for the last four years.

MR. MOSES: What proportion of the young men that go out from the school have had this training?

MR. ELMENDORF: All of them except those who have no talent whatever for drawing. They simply have the drawing lessons.

MR. MOSES: What proportion of the pupils who go out so trained are able to get positions by which they can make a living?

MR. ELMENDORF: I cannot say, but every one I have tried to get a position for has got it. Here I can refer to eight or ten.

MR. WALKER: I desire to ask Mr. Elmdorf how long his pupils are under instruction before they begin mechanical drawing?

MR. ELMENDORF: They begin industrial drawing only in the last three years of the course.

MR. WALKER: Is this work of industrial drawing a preparation to your other work?

MR. ELMENDORF: Yes, sir; two weeks only. It is simply to teach drawing. It is simple. The Prince has a letter for the Emperor. The Emperor occurs to the Emperor.

bearing on their inquiries, and any resolution emanating from the convention, and communicated officially to this commission, would be especially valuable in the eyes of this commission." This is in reference to art. And perhaps the proper resolution might be passed in the convention this afternoon.

THE CHAIRMAN: You will please draw up such resolution.

The next subject in order is "Oral Instruction," to be led by Miss Laura D. Richards, of Philadelphia.

MISS RICHARDS then read the following paper on Oral Instruction, which was received with great applause:

My first work with a class of beginners is to regulate their breathing. It is of the first importance in securing good, firm tones. Most deaf children breathe very irregularly, inhaling and expelling the breath through the nose and mouth at the same time, and when it is vocalized they must therefore give nasal tones. Let individual drill be given. Have each child come to you and exhale and expel the breath with the nasal passage closed, thus forming the habit of sending it through the mouth instead of the nose. Pupils will at first breathe from the top of the lungs, and very feebly, but by degrees they will breathe deeper and firmer, until they fill the lungs and breathe as strong as necessary. On correct breathing depends all voice tones. If a child fills its lungs and can hold its breath well, its voice will be low, strong, and firm; but when it breathes only from the top of the lungs, its voice will be high and throaty. I continue this breathing exercise, giving it twice and often three times a day, for at least three months. After that I give it once a day. Let me say that this is not the easiest exercise for the teacher; but proper breathing is of such importance that every effort should be made to acquire it. Another exercise is to free the muscles of the lips, tongue, and throat, and to make the tongue as nearly flat as possible. If the tongue lies flat the voice can pass out of the mouth clear and full; but if it is drawn back into the back part of the mouth, filling the throat (which is often the case), the voice will be thick and disagreeable.

In conducting this exercise each child should be provided with a hand mirror, and all perform the exercise together.

It is my practice to go through each exercise myself, then have the children imitate me. It is always better to give them an example of what you want them to do, and encourage them to imitate you, than to require them to go through their exercises independently and unguided.

In giving the vowels I have found it better to begin with "ä," because when giving it the tongue lies perfectly flat and the throat is well open. When giving the vowels it is necessary to drill each child separately, directing its attention to the chest. If that is made to vibrate the voice will be low and strong. We cannot have a high-pitched voice if the chest is made to vibrate well while speaking. There is no need of having high-pitched voices. It is the teacher's fault if the voices are poor; on her depends the quality of the tones.

We should not force voice at the beginning. The muscles of the mouth should be kept free, yet the child should use sufficient energy to put life into the work. We must work very slowly with the voice; in deaf children—*true* deaf children—it is a product of slow growth and demands careful nursing. After securing a pleasant voice with "ä" give "â," because with it as with "ä" the tongue is kept low and throat free. For "â" the tongue is lower than for "ä," and the

voice must be deeper and it should be stronger. Then we have "ō." For this we have two positions, the first like broad "à," then the rounding of the lips. In giving "oo" we have the same position as for last part of "ō." We take the same position for "ö" as for broad "à," the only difference is the position is not held as long as for "ā."

Next we have the front vowels. It is better to wait until the consonant "s" has been given before giving "ē," because for it we have nearly the same position as for "s," the only difference is that the teeth are a trifle farther apart for "ē" than for "s." When the pupils can give a good "ē," let "ī," "ē," and "ä" be given by gradually opening the mouth farther and farther.

In giving the consonants it has been my custom to give "f" first, because I get more force with it at first than with "p," which is commonly given.

As soon as I have a consonant and a vowel I combine them, as "fa," "fa," "fä," "fä." Next give "p," and then make another combination, and when they can say that easily, we have the word "papa." I then give them the word with its meaning. Now give "wh," "th," etc., giving the easiest first. One is apt to have difficulty with "t," unless the pupils have free use of their tongues; therefore it is better to leave it until one of the last. After securing good voiceless consonants, give those with voice, beginning with "w" and "l." In giving "l" the tendency is to close the mouth passage and give a nasal sound. To overcome this difficulty, give exercises with the mirror.

Make the tongue as narrow and pointed as possible, while depressing it at the back, and then bring the point up to the upper gum, leaving a space over the side for the voice to pass out. I continue making combinations. "S" is quite troublesome. (Tell how it is made.) The tendency is to let the tongue fill the mouth, closing the passage through the middle of it. Separate the teeth and open the passage with a pencil or anything small, and it can be easily given. Let the child hold its hand before your mouth to feel your breath while you give it, then give it after you. It is better to save "s" with "t" until the last.

We often have difficulty with "k." When I have a pupil who cannot give it, and another who gives it very well, I let that child work with the one that fails, and I am sure to have a good "k" very soon from the child who failed with me. I have never known this plan to fail. I find that they understand each other much better than they do me, and that a pupil will frequently learn much sooner from another pupil than from me. Each pupil strives to be first, and I try to cultivate that spirit among them.

I think this the cause of their learning so quickly from each other. I try to excite emulation and pride in their work, and my pupils are very proud of talking. As soon as I give an element—"f" for instance—I expect them to take it from my lips and write it on their slates, and I give them all the single elements to write from my lips throughout the first year.

I give individual drill, but I strive as much as possible to give class drill also, since by so doing one can save much time. Try to keep them busy, and when resting from articulation teach language and lip reading.

I begin language teaching by showing them an object or picture. A school-room should be well furnished with toys. We will show *them a ball first*, because that will interest them. I ask its name, and

when I find that none can give it, I write the word "ball" on the large slate and have them copy it. I now show them a cat, and write that word on the slate too. After they have written these words several times, I show one of the objects, asking for its name. When they can write the name as soon as the object is shown, I speak it very slowly, repeating it again and again, and they write it from my lips. Then I give them the other word, "cat." I give these words first, because the first element of one is made with the lips closed, and of the other with the back of the tongue closed. I repeat these words until I know by their faces that they are sure of them. I then ask them to show me the ball, and they show me first to the word and then the object; and those who forget are sure to be told by those who remember that they are not very smart.

I give them five or six name words, and let them remain on a large slate, that they may be constantly before them. We work with these words until they are tired of them and want new ones, and ask the names of the different objects in the school-room, which they very soon will do if they are kept interested. As soon as they can form the letters, I have them put all their little wants into words, or I do it for them, and they copy it, leaving it on a large slate for their use whenever the same thing is wanted again.

When a child has something to tell we stop everything until he has made himself understood, and it is written on a slate so that all can see it; then we spell it with our fingers.

They soon understand that their thoughts can all be put on the slate for them to see, and they are very much interested as well as pleased. This interrupts the regular school work, but it is time well spent.

In teaching the elements try to teach those first which they can give most easily, and as soon as possible give a word—"a" has been given, "f" has been given too, "l" comes soon, and we have the word "fall," which is easy for them to speak. Now we have a word to study, and all are very much pleased. As soon as we have "w" and "sh" we have "wash" and "shawl." As the vocal organs have the same position in giving "p" and "b," with voice added for "b," we have the word "ball." We repeat these words again and again—"wash," "fall," "ball," "shawl." We have now gained another point and have a lesson for the evening. They write this lesson on their slates and study it during the evening study hour, speaking every word. In the morning each child recites orally the lesson committed to memory. For the next lesson we change the order of the words—"fall," "shawl," "wash," "ball." We continue in this manner until we have a number of words. As we have the words "wash" and "ball," we have an action to perform.

I try to keep them interested every moment. I cannot have a careless, thoughtless child. We now have "wash the ball." I speak the words and they write them. I also write them on the large slate, and give them the meaning of the word "wash." We have a basin of water and wash the ball, repeating the action many times. And each time it is performed they write it; but do not speak it, because the combination "shed" is very difficult to give; but they know the meaning of each. We now have, wash the wall; and they have wash the ball and wash the wall for their lesson in the evening.

When they can write the name of several objects, I give them action writing, even before they can speak the words. We continue with

few simple actions until they are able to speak them; then they take them for their lessons out of school. I try to have each child understand every word in the sentence before speaking it, and firmly believe that their knowing the meaning of the words they are attempting to speak aids them very much in their articulation.

I know this is not the method pursued by many oral teachers; but it is the one I have pursued, and I believe with a success that fully warrants its continuance.

MR. W. K. ARGO, of Kentucky: How many pupils did you have in your class?

MISS RICHARDS: I had ten pupils last year.

MR. S. T. WALKER: In the examination of my class in articulation I have found two principal difficulties, which, perhaps, Miss Richards can give me some light upon. I find that congenital mutes, when they try to combine elements that they have learned from their teachers, into words, they give the elements so distinctly as to make the word unintelligible. For instance, take the word "ball." They have learned the elements of that word separately, and when they come to pronounce the word, after several months explanation, they do not seem to be able to make a proper coalescence of the elements. They pronounce it "b-aw-l." Another difficulty is the forming of certain letters or elements, like the letter "k," and they put too much voice in it. I think I understood Miss Richards' explanation of that, however.

In regard to the difficulty in the coalescence of the elements that they have first learned, would it not be better to try to teach the words as units, rather than as so many parts.

MISS RICHARDS: I prefer giving the elements first, but some prefer giving the words as a whole. If I desired to teach the word "ball," for instance, I would first teach them to give it easily, having the free use of their throat. That is one trouble that deaf children have; their throat is kept too rigid. The muscles of the throat should be as free as possible. I should give them the sound of "p," and then teach them to say "p-p-p" a great many times before I gave the word "ball." "P" and "b" are nearly the same. If they do not give any voice at first, it does not matter. I would teach it so easily that they will gradually come into the habit of saying "ball," "ball."

MR. WALKER: How do you teach a rapid transition from one word to another, in every sentence?

MISS RICHARDS: I differ from many teachers in this respect. I have them speak the words separately at first. I teach them to use the article with the following word. But at first, to get a distinct articulation, I should have them give each word separately; and after they have acquired distinct articulation, then I should teach them to lap the words as though they were written in one word.

MR. WALKER: At what stage of instruction do they commence lapping?

MISS RICHARDS: I have been teaching this class for a year; and I have just begun to teach the lapping. Some of them could acquire it sooner than others. If they are free with their vocal organs, they will get it sooner.

DR. P. G. GILLET: I regard this as one of the very important questions upon which we wish to get light from all points of view. I suppose the whole subject has been under discussion and criticism, and there are many I would like to hear from. I would like to know

how nearly they coincide with the view expressed in Miss Richards' presentation of these points.

REV. THOMAS GALLAUDET: I would like to ask Miss Richards if she uses symbols for all of the visible speech?

MISS RICHARDS: No, sir; I give the elements of the language first, and then the letters.

REV. THOMAS GALLAUDET: By what method do you give your pupils the meaning of the words you write out on the slate?

MISS RICHARDS: If I desire to give them the word "wash," I should take a ball and perform the action. If I desire to tell them to "open the door," I would open it to show them what I meant.

I will ask Sister Mary Ann to state how they teach in their school. I believe they teach articulation, and we would like to hear what they are doing.

SISTER MARY ANN, Principal of the institution at Buffalo, N. Y.: I have not come here prepared to say anything, but as the question has been asked me, I will state that I think we have one advantage, although our system is somewhat the same as Miss Richards has explained to us. At our school all the pupils use signs before we commence to teach them articulation. Therefore, all of our pupils become interested in the little deaf-mute who comes to school, and they take it, and play with it, and talk with it, and make signs to it. When the child is ready to come to the class—it may be the first day—as it comes before the teacher we adopt whatever method will please the child most. And in showing the child an object, we do not prevent the child making the sign of the object. At the same time we do not prevent the child trying to use the name of the object. Of course it is an understood thing that the elements are also taught. The most of our children have studied the method of articulation. I think it was about sixteen years ago that we took up the method of articulation. At that time my attention was drawn to the subject by Professor Bell. We have also discarded in some respects the use of symbols, because we think it is the loss of time. We use the elements, and also exercise them on syllables and words from the first moment they come into the class. If they can use the hand, or if they can use a book, or even if they make an attempt to use it, we allow them to do so.

I am not engaged in this work, and I have not been for some years, myself. We give great liberty to our teachers. At the same time they are all well instructed in both the sign language and the articulation method. Our teachers have been drilled by the older teachers, and they also have had the advantage of going to articulation schools and studying up the methods of articulation as used now in any of the schools, and I suppose in every school throughout the country. The sister who is with me is engaged in the work, and if she wishes to say anything in addition to what I have said she will do so.

MISS RICHARDS: We shall be very glad to hear from Sister Dositheus.

SISTER MARY DOSITHEUS: Our younger pupils are taught by the word method, giving them words as a whole and not the elements at first. The teacher shows an object to the pupil and speaks the name, which the child tries to repeat, such as "fan," "top," "lamb," "ball," etc. The pupils learn to speak the word, then to spell it, using the manual alphabet, and finally to write it.

After they have learned a great many words in this way, they are anxious for a key to speech, so that they may get new words themselves. The elements are taught them.

Last year I had a class of boys congenitally deaf, or practically so, whose ages were from fourteen to sixteen years. Some of them had been taught by the word method before they came to me, and could speak a great many words. Some had never been taught articulation, but as their mental development was about the same as that of the former, they improved nearly as rapidly, with this difference, that they did not speak with as great ease, not having had practice enough in using the vocal organs. After learning the elements they have no difficulty in speaking every word they meet with, if it were not for the irregularities in our English spelling. We formerly taught the pupils Bell's Visible Speech symbols, but think it takes up too much time without helping them sufficiently.

At present, in teaching an element a diagram of the vocal organs used in that element is made on the large slate by the teacher. The pupil's attention is called to the principal active organs, viz.: the under lip, the point of the tongue, the top or front of the tongue, and the back of the tongue. If a pupil takes a wrong position, his attention is called to it by making one of these curves:) under lip; ∪ point of tongue; ∩ top of tongue; (back of tongue, which enables him to see his mistake.

We now use the diacritical marks, using Worcester's dictionary instead of the visible speech symbols; not spelling words according to sound, but writing them correctly, drawing a line through the silent letters, and writing the equivalents of other letters or combinations above the same with the corresponding diacritical marks. The drill in lip reading is given with the single elements, syllables and words, so as to avoid guesswork, with a sentence thrown in by way of encouragement. I have entire charge of my class in the school-room. I teach articulation and lip reading one and a half hours every day. In teaching arithmetic, geography, etc., I use speech as much as I can, but also use the manual alphabet and signs. My pupils speak or write the answers.

The semi-mute class is in charge of another teacher who teaches orally, sometimes making use of the manual alphabet and signs when they are a help.

MISS RICHARDS: I believe Miss Fish has something to say as to her method of teaching the vowel sounds.

MISS FISH, of Maryland: Four years ago I carried visible speech with me to Maryland. I supposed there was nothing to take the place of it—that I could not possibly teach without it. When Mr. Ely put me down before my class he said, "I do not want you to use visible speech." I was completely at a loss what to do, but after several plans had been tried I took the translation of Professor Bell's Visible Speech Chart as it was used in Northampton, and found it answered my purpose entirely. Each letter or combination of letters represents an arbitrary sound, and by them pronunciation can be corrected just as readily as with the symbols.

p	s	ē	{ a	ōō
t	sh	i	{ ar	oo
k	sh	ā	{ ah	ō
			{ ū	
b	l	ě	{ er	{ au
d	l	ă	{ ir	{ or
q	r	ī	{ ur	{ ō
m	r		{ ou	{ oe
n	wh		{ ow	{ oy
ng	ch	x=ks		
f	j	qu=kwh		
v				
th				
th				

nk = } ngk
 nc = }
 c = { k
 s
 pf=f

I teach all of the sounds separately, except "l." I teach that in combination. I spell all of my words correctly when I am giving a child a sentence, according to the English method.

MR. CLARK: Do you use diagrams or drawings of the vocal organs in teaching?

MISS FISH: I use mirrors.

MR. JENKINS: Have you not found value in the analysis which Professor Bell makes of the vocal organs, and so forth, in an increased delicacy of ear? Are you not able to correct faults by having studied the action of the vocal organs as a whole?

MISS FISH: Certainly. I think it is very necessary for the teacher to understand the location of all the organs of speech, and I teach it to the child.

MR. ELY: Do you not find that a knowledge of Professor Bell's system of visible speech is of advantage in your teaching?

MISS FISH: Certainly; a knowledge of his system is absolutely necessary to a teacher of articulation; but not necessarily a knowledge of the symbols.

PROF. SAMUEL PORTER, of Washington: I would like to ask whether, in teaching the elementary sounds of consonants, the teachers are particular to give the true forms, as one is initial and the other is terminal. For instance, the "p" in "hope" is different from the "p" in "par." In the word "quick" you have the two forms of "k," the initial and the terminal—two different actions. I wish to ask whether the teachers are particular to make that distinction with different actions of the organs, as the consonants are terminal or initial; whether teachers of elementary forms of consonants are particular to drill their pupils in these two particular forms?

MISS RICHARDS: Yes, sir; I teach them that that sound is to be made very gently at the end of a word. And I have no trouble with that.

MISS TRUE, of Rochester, New York: In case of any mistake made by a child, do you put that mistake before the child by some sign, or on the board?

MISS RICHARDS: Yes; I allow the whole school to see the mistakes. For instance, if I was to write on the board the word "pa," and the child gave it "par," I should write "par."

MISS TRUE: I give the initial consonant first. I use Bell's system.

MISS RICHARDS: I believe a knowledge of Bell's system is very necessary for a teacher. I think it takes one to the very root of all speech; but I think it is very laborious for the children.

MR. WILLIAMS: You say that you believe a knowledge of Bell's system is very necessary for a teacher. Do you mean that that particular system is necessary, or that it is necessary that the teacher should understand the principles of vocal physiology, which I understand are just the same in Greenberger's system as in Bell's system of visible speech? If a teacher understands vocal physiology, whether he gets it from Bell's or Greenberger's system, does it make any difference?

MISS RICHARDS: No, sir; it does not, but, perhaps, because I studied Bell's system, I feel that I can get it clearer by that particular system. I studied it with Professor Bell, and realized that there was something in it to take hold of. I believe that our articulation teachers should go to the very root of the language, the mechanism of speech, and if Bell's system will enable them to do it, take that; if it will not, take something else that will. So long as the thing is reached it does not matter how.

DR. GALLAUDET: In the Kendall Green school, at Washington, the symbols of visible speech have been taught to our pupils to a considerable extent, but our teacher is using them rather less and less in teaching the pupils. She, herself, is well grounded in the system, understands it thoroughly, and makes use of it at various points as a means of assistance, but she does not use it as much as she did in the beginning, that is to teach symbols to all pupils, and require its use by them.

MR. MOSES: I have used that system more or less, and I find it of some assistance.

MR. WILLIAMS: Does your teacher understand thoroughly any system of vocal physiology?

MR. MOSES: He understands diacritical marking.

DR. GALLAUDET: In some instances with semi-mutes I have corrected defective pronunciation by simply spelling phonetically, and it succeeds perfectly. A young man once traveling with me mispronounced the Schuylkill River, and I immediately corrected his pronunciation by giving the spelling of a word with which he was familiar, and he pronounced it correctly without difficulty.

MISS RICHARDS: It takes three months' drill to perfect a child in visible speech, and while you are teaching that you are not teaching anything else. Why not spend that three months in giving the child the elements of the language? A child knows visible speech, and it is taught to pronounce through visible speech. When it goes from school who will write visible speech for it? Its teacher or those who understand visible speech can do it, but how many people in a sign school or any other school understands the system of visible speech? One special teacher understands it.

MR. F. D. CLARK: I think the same thing applies to all of our helps, diacritical systems, diagrams, and so forth.

MISS RICHARDS: We teach the diacritical marks, and they have them always.

MR. NOYES: It strikes me that we have right here a very practical suggestion, that this Bell system of visible speech is a mere help to our children in their ordinary efforts to obtain language. I wish to *inquire which is the most useful dictionary under that system.*

MISS RICHARDS: I think that Worcester's dictionary is used most in the East, and Webster's in the West.

Here the normal section adjourned until to-morrow morning, at nine o'clock.

TUESDAY, JULY 20, 1886.

PRESIDENT GILLETT in the chair called the convention to order.

MR. G. O. FAY, of Connecticut, offered a prayer.

The Secretary read the minutes of the last session, which were approved.

THE CHAIRMAN: The next paper to be read is entitled "Technical Education," by Mr. F. D. Clark, of Arkansas.

MR. CLARK:

TECHNICAL EDUCATION.

The high honor of establishing the first schools in this country where any persistent attempt was made to teach trades, belongs to the institutions for the deaf. But, though we began first, I hardly think we are keeping abreast of those who started later in the race.

For a long, long time there was little said, or, apparently, thought of the importance of teaching the use of tools, the peculiarities of materials, or the methods of working. Professor Wilkinson, by his article on the Russian system, a year ago, drew much attention to this subject, but, so far as I have learned, the California institution is the only one that has made any real attempt to follow this system, and there it is used, if I understand correctly, only in the carpenter shop. At most of the institutions the trades, with, perhaps, the single exception of printing, are not taught, but the pupils are allowed to learn what they can of them by spending some hours a day at work in the shops. In none, so far as I am aware, is there any regular course of instruction, any examination, or any attempt at either.

One of the curiosities of our modern life is the care and precision with which accomplishments requiring the use of our physical powers are taught, and the extreme indifference which we show to the learning of useful employments. If a boy wishes to learn to dance it is easy for him to find skilled teachers to analyze the step, train him in each portion of it, and soon make him an expert. Should he take to rowing, he has the same advantages offered to him; his teacher will carefully explain to him each of the few movements that constitute that art; he can even find books in which separate chapters, carefully illustrated, are devoted to "the catch," "the stroke," "the feather," "the recover," "the use of the legs," etc.; and teachers who will watch him carefully and check him at the beginning of every fault. So with every other amusement where skill is required. Boxing, fencing, riding, etc., all have their special teachers; and all need them, too, for even in such a simple exercise as running it is rare to find a boy who can use all the physical powers required to their best advantage 'till he has been taught to do so. Why cannot we have masters who will teach the use of tools as carefully and thoroughly as these teach the use of playthings? Perhaps the reason why it takes a boy so much longer to learn to saw accurately than to row swiftly is that he is taught to row, and left to find out for himself the knack of sawing.

Suppose we simply told a pupil in school to add, and never taught him to carry. He might, after long effort, find it out for himself, but

his progress in arithmetic would probably be very slow; yet that is the way trades are taught. The help that the master gives is often worse than none. He "lays off" the work and leaves the pupil to do it. Better let the pupil "lay off," and teach him how to work. There is much more in sawing than in working a saw up and down, and yet the instruction given is to give the boy a saw—too often a dull one—and tell him to saw. If he makes mistakes they may be pointed out, but the reason why he made them is very seldom explained to him. So it is with every other tool. If there is any possibility of a boy picking up the knowledge necessary to use it on the job in hand, he is left to do so; if not, so much of its use as there is present pressing need for is explained, and no more.

Are the masters of the shops responsible for this state of things? I do not think so. They have been brought up to think that it takes seven years to learn a trade. Their efficiency is judged, not by the shortness of the time in which they can teach a boy their trade, or the number they teach, but by the amount of finished work they turn out—by the dollars and cents the shop makes or saves.

This is the fundamental error that lies at the root of all our mechanical teaching, and causes much of our trouble. We expect profitable work from learners. For institutions where the time allowed each pupil is long, the present system is not even the most profitable. It would pay them better to teach the trade first, at a dead loss, and have good workmen later. For the few dollars that are saved by the present plan, we throw away our chances of making quick and accurate workmen, and probably lose more than we gain.

There should be a course through the shops of an institution, just as there is through its classes, and to do the best work this course should be as much under the control and supervision of the head of the school as the other. Each teacher of a trade should receive as much advice and direction from him as a teacher of a class does.

My idea would be to form all the younger pupils into classes which should be instructed in the use of all the tools, and the peculiarities of all the materials used in every trade taught. I do not mean that I would keep them at it long enough to learn to work rapidly and accurately; but only long enough to learn how to work and what good work is. For instance, it would take but a short time to teach a boy how to sew leather, but long practice to make him a quick and neat workman. To saw out a circle with a compass saw, accurately following the line, and squarely through the material, is an operation requiring considerable skill and practice; but the principles that underlie the work are very simple, and after sawing one or two such circles, a boy whose attention was called to those principles would remember them, and only need practice to gain speed and accuracy. To file a broad piece of metal perfectly flat, and do it rapidly and without continual testing, is one of the hardest tasks a metal fitter has; yet the principle of the thing is very simple, and to file one such piece slowly and carefully would teach it thoroughly.

It should be the object of this preliminary course through all the shops to teach these principles that underlie the use of tools, the peculiarities of the materials used, and the methods of work. When this has been done for all the trades taught in an institution, a boy could select the trade that he wished to follow with some knowledge of what he would have to do in it. Then he could make a more careful *study of it*, and gain the rapidity and accuracy that mark the perfect

workman by practice on its details. Even in this special training, the principle, that the pupil should spend most of his time on those parts of the work that he knows least about or is least skillful in, which should always be followed, would be very inimical to pecuniary gain. Two years of the preliminary training in all the shops, and two more of this special practice, ought to make a boy a good workman. It is nearly double the time allowed for speaking youth. There would then remain several years in which the pupil could do good work in return for his instruction, and probably he would do more in that time than he does now in seven years under the present method. This would still be a special training for the trade he intended to follow.

In this special training, after the first two years of general training, I should make a great departure from the methods now in use. Children are human, and the same feeling that makes a man working by the piece a much more rapid workman than he who works by the day would have the same effect upon the boy, and rapid workmen are what we want. Let the work be piece-work. If possible, let it be paid for, not what it would be worth in the market, but enough to encourage the boy to try and excel in it. If the institution cannot afford this, let a reward of some sort be held out for rapid work. The greatest trouble with almost all deaf-mute workmen is that they are slow. Is not this directly owing to the present system of spending a certain number of hours in the shop without regard to the amount of work done? The boy who apparently is always at work, though he may potter and dawdle, and not accomplish in a month as much as another does in a week, yet if he does not bother the head of the shop, generally stands as high in his estimation.

It might be a good plan to keep an account with these boys and charge them for the time spent in instructing them, and for spoiled material, deducting it from what they earn. They will, probably, be treated so when at work, and it would have a decided effect in making them careful, and teaching them to judge material.

To teach trades in this way is much more difficult than to allow them to be learned in the old way. It also costs more; but to make workmen, and not things, should be the object of every technical school shop. The old plans turn out a certain amount of finished work, too often of an inferior kind, and a number of workmen hardly up to the standard. It is hoped that the new will make workmen above the average, both in skill and speed.

The teaching in school should be fitted, to some extent, to that in the shop. In the first place, I regard instruction in scale drawing as an absolute essential for success in this kind of teaching. Not only will it be useful in nearly every trade, but in many it is absolutely necessary. Then each trade has to a certain extent a language of its own, and this language should be taught. It would take but a short time, and would help the shop work greatly.

In connection with the shop, if the institution could afford it, I should have a sort of mechanical playhouse, where there should be a lathe, a few jig saws, a set of good tools, and a place for each boy to keep his private property. Here I would give each perfect freedom to follow his own will, except that the tools should be kept in order, and damages to the institution property paid for. Knowing how eagerly many speaking boys take to such pursuits, I have no doubt

that the deaf would also, and I would expect much really good work from this playhouse.

The pupils' library should have some works that would bear directly upon the work of the shops, and on mechanical work in general.

It has always seemed strange to me that none of our institutions give any instruction in metal working. There is no reason why deaf-mutes should not excel at this, and it would open a vast field of labor to them. I have often thought that the larger institutions could teach it with great success. Most of them have a great deal of gas and steamfitting and plumbing to do, and even if they did not, these trades are as easily learned as carpentry and printing. To any wishing to establish such a shop, I suggest that in the manufacture of the ordinary globe valve, they have a field where almost all the operations in brass could be taught on small light work, and the product find ready sale. The outfit would not be very expensive. The material spoiled could be remelted, and the necessity for accuracy is such that it would be a most salutary check on bad workmanship. Should the institution that I have the honor to represent ever be financially able to carry out such an undertaking, I intend to urge the establishment of such a shop upon its Board most strenuously.

DR. GALLAUDET: It is usual for the standing Executive Committee to present a report to the convention of its proceedings from the time of the convention preceding. The Chairman of the Executive Committee presents the following report, which, with your consent, I will now read to the convention.

The standing Executive Committee beg leave to submit the following report of their action since the adjournment of the tenth convention, held at Jacksonville, in August, 1882:

Four meetings of the committee have been held since the summer of 1882—the first at the Institution for the Improved Instruction of Deaf-Mutes, New York City, on the twenty-sixth of June, 1884, at which all the members were present except Dr. MacIntire; the second at the Minnesota School for the Deaf, Faribault, July 11, 1884, at which all the members were present except Miss Rogers; the third at the Institution for the Deaf and Dumb, New York City, December 10, 1885, at which Dr. E. M. Gallaudet, Dr. Peet, and Dr. Gillett were present; and the fourth at Berkeley, California, on July 16, 1886, at which all the members were present except Miss Rogers.

At each meeting of the committee the editor of the "Annals" has presented a report, and his accounts have been audited by the committee and found correct.

At the third meeting the death of Rev. Thomas MacIntire, Ph.D., who had been a member of the committee since 1868, was announced. The committee adopted a minute expressive of their high appreciation of the character and work of Dr. MacIntire, and filled the vacancy occasioned by his death by the election of Mr. J. L. Noyes, of Minnesota.

At the fourth meeting the editor of the "Annals" presented a report of his work since the meeting of the last convention, as follows:

BERKELEY, CALIFORNIA, July 15, 1886.

Dr. E. M. GALLAUDET, Chairman Executive Committee of the Convention of American Instructors of the Deaf and Dumb:

I respectfully submit a summary of my receipts and disbursements since the last Convention of American Instructors.

Receipts.

From balance on hand August 26, 1882	\$652 79
From assessments on institutions	6,253 33
From individual subscriptions	762 09
From sale of back volumes and numbers	180 48
From advertisements	61 47
Total	\$7,910 16

Disbursements.

For printing and engraving	\$3,505 08
For salary of editor	1,000 00
For articles of contributors	797 56
For preparation of index	250 00
For postage, expressage, stationery, etc.	313 59
For shelves	10 00
For advertisement	8 00
For traveling expenses	293 80
Balance on hand	1,132 13
Total	\$7,910 16

The annual assessment, at the rate of forty cents a pupil, based on the number of pupils actually present in the institutions on the first of December, 1876, has been paid in full by the following institutions: American, New York, Pennsylvania, Kentucky, Ohio (until December, 1885), Virginia, Indiana, Illinois (since January, 1884), Georgia, South Carolina, Iowa, Mississippi (until December, 1886), Texas, Columbia, California, Kansas, Le Conteulx St. Mary's, New York Improved (until March, 1886), Clarke, Arkansas (since January, 1886), Nebraska, West Virginia, Maryland Colored, St. Joseph's, Colorado, Western Pennsylvania, Western New York, Central New York, Halifax, and Ontario institutions.

The following institutions have paid less than their assessments, receiving a proportionally less number of copies of the "Annals:"

INSTITUTION.	Amount of Annual Assessment.	Amount Paid.
Tennessee	\$42 00	\$30 00
North Carolina	54 80	20 00
Maryland	36 00	25 00
Minnesota	33 60	*20 00

*Since January, 1886.

The Louisiana, Missouri, Wisconsin, Michigan, Alabama, Oregon, New England Industrial, Dakota, New Jersey, Northern New York, and Florida institutions, and the private, denominational, and day schools, have not contributed to the support of the "Annals," except in some cases by subscribing for several copies.

The income of the "Annals" during the past four years has been slightly greater than the expenditure, giving us a balance on hand \$479 greater than four years ago.

The index to the "Annals"—volumes twenty-one to thirty, inclusive—was published soon after the completion of the thirtieth volume, and distributed free of charge to the institutions contributing to the support of the "Annals" and to the subscribers.

I respectfully suggest that the convention be recommended to change the name of their periodical from "American Annals of the Deaf and Dumb" to "American Annals of the Education of the Deaf." This would indicate its real character better than the present title, and would dispense with the unnecessary word "dumb," which is objectionable to many of the parents and friends of the deaf.

Respectfully submitted.

F. A. FAY.

At the fourth meeting of the committee a communication was presented by Miss Rogers, who was unable to be present, from the corporation of the Clarke institution, urging that the words "and dumb" be dropped from the name of the "Annals," and from the title of the convention.

The committee acted favorably on the suggestions of the editor and of Miss Rogers, and now recommend that hereafter the "Annals" be called "The American Annals of the Deaf," and that the convention assume the title of "The Convention of American Instructors of the Deaf."

The Conference of Principles held at Faribault in 1884 appointed a committee to prepare a blank form for the collection of statistics concerning the deaf and dumb. The committee so appointed met at Washington in November, 1884, prepared suitable forms for the collection and preservation of statistics, publishing said forms in the "Annals" for January, 1885. The Committee on Statistics requested the standing Executive Committee to have blank forms printed, which might be furnished to the several institutions at very small cost, and so facilitate the collection and preservation of statistics in a uniform manner. Your committee have authorized the editor of the "Annals" to carry out the suggestion of the Committee on Statistics, provided any considerable number of institutions will indicate a purpose to use the blanks.

This subject is commended to the serious consideration of the convention as one of very great importance, and the committee express the hope that the heads of the several institutions will at an early day accept and act on the recommendations of the Committee on Statistics.

All of which is respectfully submitted. By order of the committee.

E. M. GALLAUDET, Chairman.

BERKELEY, CAL., July 20, 1886.

DR. GALLAUDET: In submitting this report, I will add a single word as to the recommendation of the committee that the name of "The Annals of the Convention" be changed. It is believed that this proposed change will commend itself to every member of the convention. We are very well aware that the pupils for whose interests we are laboring are dumb, in general, because they are deaf; that is, dumb when they come to us; or many of them were. Very many very soon cease to be dumb under the helpful influence of their instructors in speech. It has been found in the experience of many of the officers of the institutions that many persons are made to feel uncomfortable by the use of the word "dumb," applied to deaf children; and that even in some cases the carrying out of laws with relation to the education of the so called deaf and dumb has been involved in difficulty. Children who are deaf but not dumb, but who are fit subjects for education in the schools for the deaf, have sometimes found great difficulty in securing the help which is afforded to those who are said to be deaf and dumb. These suggestions are found to be in the line of a general reformation of names and terms as applied to the people for whom we are working, and even to the schools established for their benefit.

The old question was once raised, "What's in a name? That which we call a rose would smell as sweet by any other name." I believe there is a good deal in a name, and that often much can be done in the way of helping a cause by giving it a correct name. So I trust that this suggestion of the committee may meet the approval of the convention, as well as the other suggestion in regard to the acceptance of the recommendation of the Committee on Statistical Forms.

MR. G. O. FAY: I would move that the report of the Standing Executive Committee, including the other recommendation respecting the change of the title of the "Annals" of our convention, be accepted and adopted; and that the members of said committee be reappointed for four years, or until the session of the next convention.

Dr. Gillett then put the motion to the convention, which was carried unanimously.

MR. J. J. CHICKERING, of Washington, then read the following paper, entitled

PHYSICAL CULTURE.

I do not expect in this paper to offer anything new or original. I merely wish to make a plea for what I consider an especially important part of a liberal education, and one which in this country has been largely overlooked and slighted. To this I will merely add a brief description of the system of physical exercise at present in vogue at the National Deaf-Mute College in Washington. These remarks apply to all educational institutions, and will have especial reference to the deaf and dumb in only a few particulars.

Cicero defines a liberal education as the education of a "liber," or freeman, as distinguished from a slave. An important part of that freeman's education, in the opinion of those old Romans, was a physical development which would enable him to form a part, undergo the hardships, and share in the victories of those legions which for a season overwhelmed the world. In these happier days we are not called on so often to share in the struggles of the empire; but is the struggle for individual existence any less keen than in the times of the Cæsars? Do we not constantly hear of the necessity of straining every nerve in order to keep pace with the times? Do we not see, Americans especially, nervous, eager, anxious; a constant drain, physical and mental, going on all the while? "A sound mind in a sound body" is not a catch phrase in this nineteenth century; it is a *necessity*. And look at our schools and see what a race is coming up to receive the burdens of the present generation! Look at the stooping shoulders, narrow chests, thin arms, and spindle shanks of the rising Americans. Remember the distinguished families which you can recall at this moment, when extraordinary mental vigor, transmitted and refined from generation to generation, with no corresponding increase in physical development, has resulted in *brilliant wrecks*—poor castaways ere the first third of their life's voyage was completed, and the richness of their freight only making more evident the folly of intrusting it to so frail a craft. Build strong this ship and then freight it with what you will.

Were the question put to me: "Why do you consider physical exercise in a gymnasium of *general* importance?" I should reply: "Because it leads to the development of a *symmetrical* body." A perfect man (or woman) is the noblest work of God. I do not consider him a perfect man whose right arm is an inch bigger than his left, whose right shoulder stands higher than its fellow, who with a splendid pair of legs and hips has a narrow chest and stooping shoulders, who with irreproachable chest and lungs must nurse his dyspepsia with stale bread and drugs, who with biceps the size of oranges hasn't strength enough in his triceps to raise his own weight. The Greeks worshiped beauty; and symmetry was with them one of its *cardinal* principles. Surely in the development of the human form

they surpassed the world, and we might safely emulate the creators of an Apollo and a Venus, if only from an artistic standpoint. But beyond this, a *symmetrical* body is the *strongest* body; it can do the most work. If one set of driving wheels on an engine is of poorer material than the other, it will give out sooner, and then, unfortunately, *both* are useless. One-sided work is never the best work; a man naturally uses the stronger of a pair of members; it is easier for him, and he is conscious of doing better work for the time being. But as a result of this, the stronger goes on getting stronger, and the weaker (through lack of use) goes on getting weaker. Finally, the weaker collapses, and then comes the crash of *both*. In symmetrical development we want to check all this.

A great change has come over the methods of gymnastic instruction of late. Such men as MacLane, of England, and Blaikie and Sargent, of America, have, by means of their thorough preparation for their work, and ingenious pulley-weight combinations, created a *science* where before was merely a series of desultory and often misdirected endeavors. By means of their apparatus, almost any set of muscles may be used and developed, while leaving the others almost untouched, and thus weak parts may be built up to that point where they can join the rest in developing the perfect man. Then, too, the using of accumulative sets of weights enables this development to go on gradually and surely, with no overtaxing or straining as was formerly the case where the whole weight of the body (one to two hundred pounds) had to be lifted at the very first exercise.

Were I asked why I considered physical exercise in a gymnasium of especial importance in connection with schools and institutions of learning, I should say, first, because it gives brain rest, immediate and sure; second, because it supplies an outlet for superfluous animal spirits.

All work of the body, whether physical or mental, results in the breaking down of countless numbers of cells in the parts used. To supply this waste an increase of blood is demanded in those parts. As the quantity of blood in the body is practically constant, when it is directed in larger quantities to any particular part of the body, the remaining parts receive less, and suffer, for the time being, a loss of vitality. Thus in the case of hard study the brain demands an excess of blood, the small blood vessels become congested, and if the effort be long continued, heaviness and headache result, while the extremities become cold and numb. Now let the student take up some brisk physical exercise; the blood is at once called to this new scene of activity, these parts are flushed, the brain is relieved, and for the time being left almost free to recuperate and rest. *Next to sleep, physical exercise is the best brain rest known!* And right here let me remark that I have observed a tendency on the part of boys to "cut" gymnasium on examination days, on the ground that they had too much to do. I have even known schools where the gymnasium exercises were omitted on examination days, for the same (so called) reason. Those are the very days of all others when, as the brain has been unusually flushed with blood, especial care should be taken to relieve the strain by drawing the blood elsewhere. If you usually exercise half an hour, on examination days exercise an hour.

I suppose it is a well recognized fact that there is in all of us a certain amount of superfluous animal spirits—devilment I have heard it called—which must be worked off somehow, somewhere. I claim

that this gymnasium is a safety-valve for just this peculiarity of this human steam engine. After an hour's work in the gymnasium no boy or man, be he five or twenty-five, cares for further physical disturbance; he wants to be quiet, and welcomes study or rest, as a change. I think the faculty of the National Deaf-Mute College will bear me out in saying that cases of discipline arising, as we might say, from *physical* disturbances, in and about Kendall Green, have diminished marvelously, if they have not indeed entirely ceased, immediately upon and since the completion of the gymnasium and the commencement of exercises therein. That an improved physique usually results in an improved moral nature, I consider a fact too well established to call for discussion.

Our exercises at Washington consist first in running a certain number of times around the gymnasium floor; the run at the beginning of the year is made a quarter of a mile, and later increased to half a mile. This is to set the lungs at work. Care should be taken to have breathing done through the nose, to have the chest thrown out, and to have the steps taken on the toes. .

Then follows a dumb-bell exercise with light wooden bells; here the circulation is started, and all the muscles set in working order. Then comes a set of exercises on Dr. Sargent's chest weights, developing all the muscles above the hips, in both trunk and arms. These chest-weight exercises are started with five-pound weights, and increased one and a quarter pounds a month, till most students, by the close of winter, take ten pounds in each box, or even more in the case of the stronger men. The new student is prone to despise the puny five-pound weight, and desires to cram his box with fifteen or twenty pounds of cold iron. Let him; he never does it but once or twice. Experience is a thorough teacher, and three hundred movements make even the grasshopper (of five pounds weight) to become a burden.

These are all the *class* exercises required. The exercises are held one hour a day, four days in the week, six months in the year—from November to April, inclusive. Farther north a month could well be added at each end. It is gratifying to notice that many students feel the need of all the exercise they can get, and appear regularly on the other two days of the week. Also during the fall and late spring months they may be found daily at the exercises, which are no longer required. There is an optional class in club-swinging which practices on alternate gymnasium days. A gymnasium captain is elected yearly from among the seniors, who leads the class exercises, and I am pleased to meet again, at this convention, two who have ably filled that position during their last year in college, and whom I am proud to point to as exponents of what can be done in the way of physical culture at the National Deaf-Mute College. I refer to Mr. Smith, of Faribault, and Mr. Hasinostat, of Jacksonville.

But, in addition, some forty measurements are taken of each man on his entering the gymnasium. These measurements are compared with each other and with the table for the standard man, as given by Sargent and others. Each man then receives a card, recommending to his use certain machines tending to develop those muscles in which he is weak. The regular class exercises occupy about half an hour, and he is expected to occupy the rest of the hour in this special work. The development in college has been very gratifying, and a frequent

question asked me by visitors is: "Are *all* mutes, naturally, such straight, strong, healthy looking men?"

I notice improvement in new men, first, in general bearing and elasticity of step, as well as a new light in what was, at first, sometimes rather a dull eye. I am inclined to think that the deaf and dumb are apt to stoop somewhat, probably from a constant habit of bending forward to see more distinctly in sign and lip reading. I know the the gymnasium at Kendall Green has done much to correct that tendency.

In the matter of lung development, I doubt if sufficient attention has been called to the disadvantage the mute labors under in missing the constant use and consequent strengthening of the lungs and diaphragm in ordinary speaking and singing. The story is told of some famous tenor, that in rehearsing a new score he struck for a high note; it failed to come, and summoning all his strength he essayed a second time; this time it rang out clear and strong, but he felt a sudden weakness in his shoulder. On examination it was found he had broken his own collar-bone in the strain brought to bear on it by the muscles required to hold the chest firmly during this remarkable vocal effort. I cannot vouch for this story, but the mere fact of its being told shows the immense amount of muscular development which must result from our daily speaking and singing. I cannot but believe that a simple exercise which should consist merely in having a class of mute children, several times a day, throw the shoulders back, inflate the lungs, and give utterance to any vocal sound whatever, provided it was given with a will, would be of great advantage in strengthening the lungs and thus more completely purifying the blood and improving the general health.

One trouble which presented itself was to convey the idea of rhythm, and thus enable the students to keep step in marching. A sharp snare drum solved this problem; most could feel the vibration and they carried the others with them by that sympathy which always exists in masses of mankind.

I have upon the board a few samples of gratifying results in both increased size and symmetry, simply to make my meaning clearer. The average chest girth of about fifty young men showed the following gains:

	November.	May.
Inflated .....	.897	.918
Repose .....	.853	.864

The measurements given are decimals of a meter.

The greatest gain in chest girth was:

	November.	May.
Inflated .....	.890	.972
Repose .....	.855	.910

Some interesting cases occurred of the development of limbs into symmetrical proportions where marked discrepancies existed when the first measurements were taken.

A single illustration will be sufficient:

	November.	May.
Right calf .....	.377*	.388
Left calf .....	.374	.388
Upper right arm .....	.297	.305
Upper left arm .....	.300	.305

In concluding, I would say: See that your exercises are *regular, methodical, and judicious*.

A small amount of exercise taken *regularly* is worth far more than great exertions made spasmodically. An hour a day, four days in the week, during one's school life, doesn't seem much to give to these bodies of ours, which we all hope to make last through the threescore years and ten allotted to mankind.

Let exercise be *methodical*; don't put any one through an exercise unless he knows what it is for. Any child can be taught anatomy and physiology enough for this. Let him *know* and *see* and *feel* what muscles he is using, and what the effect will be.

Let exercise be *judicious*; use a muscle until it is *tired*, but not until it is *strained*. In the former case *strength* will result; in the latter, *lameness*.

Put in your libraries books on the subject, and start the boys and girls to reading them. Blakie's "How to Get Strong and How to Keep So," "Strong Bodies for Our Boys and Girls," and Sargent's manuals of exercise will be sufficient.

Don't try to raise up gymnasts, but perfected human beings. If any one has a talent for the heavy apparatus, can shine on the parallels, the springboard, the horizontal bar, so much the better; encourage him; it will add interest and be a good thing; but it isn't necessary that a finely formed man or woman should ever even *see* the heavy apparatus. Dexterity on the heavy apparatus is the result rather than the means of physical development.

Above all things, *start in early with this work*. More can be done in one year while a child is growing than in five after he is grown. You can hardly begin too early with the little ones. I will not say, "Give them a dumb-bell for a rattle, and a pulley weight instead of a go-cart;" but I trust you get the idea. Make of them, *not athletes*, but *athletic, strong, symmetrical men and women*.

PROF. E. A. FAY: I should like to bear my testimony as a member of the Faculty of the institution in Washington of the very great benefit which our students have received from the instruction in gymnastics given by Mr. Chickering. We have seen the benefit in the improved health of the pupils, the largely diminished visits of the physician and the consequent reduction of his bills, and in the general good order and good conduct of the students, that superfluous steam which is usually generated among a body of young men being worked off in the gymnasium instead of in the college halls; also in their improved mental bearing. Upon one of our recent presentation days one of our Directors expressed his great surprise at the steady tread and fine manly bearing of our students, and asked us how we could explain it. The explanation was that all of these young men that graduated had had Mr. Chickering's gymnastic training during the whole of their college course, and the effect was evident in their bearing and appearance. There is no department of our college work to which we attach more value than to the gymnastic department.

MR. NOYES: I wish to say here that our experience during the past year, in which we have enjoyed a new gymnasium, is in perfect accord with every point that the writer has made, and with the remarks of the last speaker. I have had nothing that has relieved me so much in the matter of discipline during the past year as the use of the gymnasium. The health of our pupils has also been much improved

by it. We give our girls an opportunity to enjoy the gymnasium as well as the boys.

DR. E. A. FAY: And so do we.

DR. GILLET: And the experience of the Illinois institution is going to be the same. [Applause.]

The following paper, entitled "Our Institutions as Temporary Homes for the Deaf," was then read by DR. G. O. FAY, of Hartford:

OUR INSTITUTIONS AS TEMPORARY HOMES FOR THE DEAF.

In addition to the work of the school, institutions also provide the various ministry of the well ordered home. Correct personal habits and exemplary morals, social refinements and services of worship, wholesome recreations, hospital care, and dietary regulations; a discipline elastic, as gentle as the feeblest, yet sufficiently resolute to control the most sturdy; a spirit of liberty united with equitable system; an eye seeing everything and nothing; a supervising energy that shall rid the administration of idleness, vice, and presumption; a harmonizing power that shall cause the general current to set one way without eddies, frost, or division; a commanding superiority of character that shall attract rather than enforce—these and other desirable conditions are to be provided, if brick walls are to be quickened into a living, a real institution. The parent, who has never allowed his child to sleep away from the parental roof a night, intrusts to the institution the child's whole life, substantially, for ten years, and those the most plastic. How confiding the trust! How serious the responsibility!

An institution is more likely to flourish where the authority of the school and of the household rests in the same person. Singleness, directness, and symmetry of management can be best secured by the employment, in judicious division and gradation, of a sufficient staff of assistants. Independent departments, not necessarily inharmonious, frequently are so. The importance of high character and of ability, of technical education and of easy social facility, at the head of the educational department, is generally conceded. The domestic department, even when independent, does not always fare as well. And yet personal qualities, equally high, have full scope in the management of its various affairs. The educating influence of the eighteen hours spent daily in the domestic department is as important as that of the six spent in the school-room five days of the week. The purchase and use of supplies, the keeping of accounts, the repair of buildings, and the care of stock, important and indispensable, are not so important as the ability to mingle socially, controllingly, with the children themselves. Good business qualities do not necessarily qualify an officer to be the head of a family of young people, from two hundred to five hundred in number, all using habitually a language with which he may be wholly unacquainted, and to learn which he may be too old, too busy, or entirely indifferent.

Institutions should be as large as is consistent with thorough control. Several small schools are likely to be, each of them, inferior in quality to the same united. They are, separate, the ungraded, poorly equipped, rudely taught schools of sparsely settled districts as compared with the cultivated schools of populous centers. They are the cobbler's shop of the cross-roads as compared with the factory, the *machine shop*, of the city. A degree of concentration in any art is

favorable, is essential, to its best development. The best pantomime, the best equipments, the best classification, the best instruction, the best body of opinion, sentiment, and character, will be found in the larger schools, when well administered. A school of two hundred will produce better results than any smaller. When mutual acquaintance is becoming slight, when executive energy fails to reach and to harmonize details, when neglect, abuse, or misconduct can exist for prolonged periods unnoticed or concealed, when the necessary daily tactics of the household are burdensome and oppressive, then, and not till then, has the institution passed the true limit of its population, and aggregation has become an evil. Deaf children cannot be sorted out and locked away, indefinitely, in wards, like insane patients and criminals. General assemblage for various purposes and free social circulation must and should frequently occur throughout the day.

The sexes will be present at all institutions in the ratio of three males to two females—a fact not inconsistent with equality of the sexes at home. This curious inequality in number results from a degree of popular indifference to female education, the greater sensitiveness of the sex itself, and a greater parental solicitude for the security of daughters away from home. This proportion in demand can be relied upon in the construction of buildings.

The officers and employés of an institution are emphatically, more than books, the educating world of the pupil. They should possess the best personal qualities of the best homes. They should be safe, agreeable, profitable associates for the pupils out of school as well as in it. A certain degree of association with the humblest employé is inevitable, nor is it altogether undesirable. It should be of a useful, never of a corrupting, or of a merely negative character. The possibility of neglect, abuse, and injury in any case, and their occasional occurrence to a shocking extent, suggest the need of the utmost care in appointments, as well as of sleepless vigilance in subsequent oversight. The institution, like the home, embraces the interior life, the confidential experience of many persons. Its officers should be faithful to its domestic characteristics, and refrain, when justice, delicacy, and charity forbid, from the public exposure or rude exhibition of its intimate events and incidents, however innocent or trivial. Such honor, scrupulous and discreet, will promote confidence and coöperation between parents and officers. Happy is the institution whose officers, of either sex, deserve such trust!

The appointing power in our country is, in fact, too often heedlessly indifferent to the qualifications and conduct of appointees. Some executive officers, at the time of their appointment, know nothing of, and some even thereafter care to know nothing of, the natural language of the deaf. Physicians and supervisors are often appointed or removed upon the exigencies of national and State politics. Stewardships, family superintendencies, and matronships are doled out as rewards by the secret service or pension departments of political parties. Our parties should insist upon the best administration, and do well to depute the authority to secure it to trusted, reliable men of their own faith. Mixed boards may be unmixed evils. Trustees of any faith prostitute their trust, however, when they bond the appointments which they control in payment of political debts, or when they use the educational interests of the deaf, and the

care of them, as political capital mainly. The people have not established these institutions, and do not now support them at heavy cost, with a view to providing temporary homes for intriguing or starving partisans. The people did not build them to be converted into party ambulances.

Institution life should be organized with leading reference to the welfare of the pupils themselves. In the appropriation of rooms, the arrangement of school hours, the assignment of housework, the consumption of supplies, the general use of the premises, large opportunity exists for officers to provide for themselves first, and incidentally for pupils. This is not parental; it is simply and only mercenary. Evils of this nature have led, sometimes, to the exclusion of the domestic life of all adults, or of as many as possible, from the institution building. Social privation is the chief calamity of the deaf, and should be alleviated by every reasonable expedient. Properly regulated and pervaded by a generous devotion to the welfare and progress of the pupils, the incidental society of as many adults as possible—at any rate, of teachers and employes—is beneficial, and should be recognized, encouraged, and regulated by careful provision and privilege. A spirit of generous interest in the deaf will also protect the duller, perhaps uninteresting, pupils from premature dismissal. Pupils should not be left to suffer from delayed promotions and hasty removals in the interest or at the caprice of ambitious or impatient teachers. Institutions should not be administered primarily for the comfort of a staff of officers, or chiefly in behalf of the brighter and more attractive children.

Institutions having the whole care of children between the years of ten and twenty—children with whom communication will always be especially difficult—owe them an industrial training. The combination of this with school work has resulted widely in the enforcement of work hours in the morning and in the afternoon of each day. The full employment of the foreman, in itself desirable, has tended to an undue extension of the daily time of the pupil. Of late, and, as a remedy for obvious effects, two rotating systems have been put into operation. By one, pupils attend school half a day, and work the other half. By the other, pupils attend school two thirds of the day, and work one third. This latter proportion is preferable, because sufficient. The pupil becomes reasonably proficient in his trade, and has more time for school work. The urgent, predominant importance of this with the deaf is felt keenly by the older classes, and by the better scholars. Those trades are indicated which, other things being equal, require the least social cooperation. Shoemaking, carpentry, tailoring, printing, gardening, and the arts of design, have proved most satisfactory.

Day schools for the deaf are sustained in some of our large cities. The public is relieved from the support and care of the pupil out of school hours; and the prolonged, painful separation of parent from pupil, incidental to institution life, is escaped. Day scholars, however excellent their instruction may be, do not advance so rapidly as institution scholars. Home life—which at the outset could, confessedly, do little or nothing toward their education—does but little more at a later period. Home life means far less, educationally, to the deaf than it does to the hearing. Deaf children at home measurably stagnate or drift. The devoted mother, the faithful sister, the attentive brother, *willing* to be the constant literary companion of the one deaf mem-

ber of the household, are rarely met with. In the busy life of the family, the deaf one, at any age, is left to himself, not exactly intentionally, perhaps unavoidably. Affection is lavished, but literary companionship is omitted. Like the frog in the well, the school of the day is severely taxed to make up for the night's decline. The plea that such pupils practice at home what they learn at school is largely contradicted by their experience.

Should institutions for the deaf have a cottage or a unitary character? Each system of construction has characteristic advantages. With the deaf, the great importance of intelligent society, a condition to be scrupulously fostered, and the necessity for unusual attention to details in administration, turn the scale in favor of the unitary plan. Very satisfactory models of institution buildings now exist in the country. Size, the shifting tenure of service, the ignorance of employes, accidents, and, most important, incendiary attempts, not infrequently occurring, indicate the undoubted wisdom of building fireproof.

A notion has prevailed that institutions for the deaf are unnecessarily large, and their normal number of pupils is by some compared unfavorably with the capacity of the hospitals for the insane. The deaf require superficial space for the whole number in a dining-room, in dormitories, in sitting-rooms, in school-rooms, in an assembly-room, and in play-rooms. Other rooms are also needed for the convenient and successful management of a large household. Each pupil should have a single bed and a single desk in both study and school-room, with large leeway. The style of support should be inviting to the better class of citizens, and will, of course, be acceptable to the poorer. There should be no disposition, under the pretext of economy, to run it down to a pauper basis. Such parsimony will work a blight. The grounds should be, for suitable recreation and ornament, twenty-five acres in extent. If the buildings are fireproof, and then only, they need not be contiguous to a large town or city.

But the details of philosophy, of school methods, and of administrative management, with all occurring cautions and precautions, are endless. Institutions for the deaf, to deserve the name, must embrace and provide for the whole daily life of the pupil, from seed to fruit, in widest circle. The best elements of the home, of the school, of every department of human life, should be so gathered, combined, and administered as to promote, in the period of his youth, his highest educational well-being, and so to qualify him, the peer of the hearing, to discharge with pleasure and honor the full functions of an American citizen. The State, the nation, as well as corporations municipal, and those charitable, composed of private citizens, among all their various trusts, assume no one of greater delicacy, difficulty, importance, or promise. Theirs is the privilege, receiving the full light of the past and acting up to the opportunities of the present, to lay foundations that will not crumble beneath the wiser building of the future.

THE CHAIRMAN: These four papers are now before the convention for discussion.

HON. ERASTUS BROOKS: I would like to say a word or two upon these subjects. In the first place I regard the subject of mechanical education as the one great leading subject of the country. If there is to be an end to the agitations which disturb our country from one extreme to the other, the element for the mending of the present

disastrous state of things is to be found, in my judgment, in the mechanical education of the pupils in the several institutions of the country.

I need not say to an intelligent audience like this what transpires almost every day in the year; how labor and capital are in constant conflict; what a disturbance there is in everything which relates to labor, and to almost every department of labor; what bloody conflicts have occurred in the great cities of the Union; how many thousands and tens of thousands of people are idle; how everywhere the community is agitated and disturbed as almost never before, in regard to the labor of the country. Here in California in regard to the Chinese, and elsewhere in regard to the large importations from abroad of thousands and tens of thousands of people who undertake to control the capital and regulate the labor of the country.

In the olden time, within my memory and the memory of some present, it was the rule to employ apprentices to serve, not as in England for the long term of seven years, but to have an actual apprenticeship by the consent of the parent, the guardian, and employer. That custom has all gone. Boys who learn trades, while learning them are not satisfied; they stay a little while with the employer and then strike out for themselves long before the age of twenty-one, claiming all of the emoluments and immunities which belong to the man who has served his long term of apprenticeship. One consequence of this is the almost total abolition of what is called the apprentice system.

Now I desire to say a word in regard to the division of labor, so called. In my judgment, in an institution like this, Mr. President, or like the one that I in part represent here, it is possible, without interfering with any educational duty whatever, to make a man or a woman qualified for self support when they leave the institutions with which they are connected.

In our institution we make as perfect a printer as the graduate from any of the newspaper offices of the country. We print our annual reports. We have asked the Legislature of the State to pay us as much for the type setting and piece work which belongs to the printing of the "Annual Report" as the Public Printer would receive if the work was done by him.

We make carpenters who are qualified for employment when they leave the institution. We have qualified men to teach carpenters and joiners and cabinet makers; farmers qualified to take care of the grounds and produce what is necessary in the protection and improvement of the lands allotted to them.

We have engaged, as you have heard this morning in the paper read here, in the art department, and in the future of that art department, to provide employment for hundreds who in the future will graduate from that institution. And I recommend this most heartily to every institution. Why? In the first place, among the people at large there is a sympathy with those who are unfortunate enough to be deaf. In the next place, a deaf pupil may be just as well qualified to make a good drawing, a good picture, or a good painting as a miscellaneous class of people who do not belong to these institutions. And hence the importance in regard to art and in regard to mechanics, not only in institutions for the instruction of the deaf, but in all of the institutions of the country for qualifying those who are pupils *in any school, for the future occupations of life.*

The Superintendent of this institution was pleased to make some allusion to President White, of the Cornell University, of which I was a Trustee. There we do more in regard to mechanical education than anything else. One of our liberal citizens has given \$150,000 for teaching the students their mechanical work.

One of the great improvements of our own time is in what is called polytechnic education, in which pupils are directed, under the wise advice of parents and directors. And let me say this for the encouragement of others: that we have never graduated a boy from the Cornell University, or the mechanical department of that institution, whose services have not been sought for long before the time of his graduation. And when, in an institution like this, and kindred institutions, you are able to say, "Here, at least, is the beginning of a good carpenter, a good joiner, a good printer, or a good artist, its future is as certain wherever material support is necessary, as that day follows night. [Applause.]

THE CHAIRMAN: I find in the question box the following question, "Can a teacher do good work for eight hours a day?" and will request Professor Clark, of Arkansas, to reply.

MR. CLARK: There are several points to be considered in answering that question. My friend, Mr. Brooks, for whom I have the greatest respect and reverence, a few days ago drew our attention to the old fashioned school teacher of many years ago. That brought up to my mind the idea of a man, sitting in a chair, calling up the spelling class and giving it the words, and so forth. I don't see any reason why a man cannot do that sort of teaching as long as he can keep awake; I would not say eight hours, but all the rest of his time between his eating and sleeping, and a little exercise, he can devote to that kind of teaching. But I know of no man that I can think of that can teach as I require my teachers in Arkansas to teach for eight hours a day. There may be some such men, but I do not know them. In the course of my life I have tried many different occupations. I have stood guard duty four hours on and four hours off during a month at a time; I have been in the saddle from sunrise until long after sunset; and, if you can call it work, I have followed a dog, with a gun, as long as I could see to shoot, and I never in all my life felt so utterly used up as at the end of eight hours teaching after the first week or two of a session. I do not think that any man or woman can do good, conscientious work in the school-room for eight hours.

Dr. Peet, in his paper the other day, explained their system of instruction in New York. He said the teacher *sits* in a chair, calls up a pupil, and tells him to write an exercise upon the slate. That system was not in vogue in New York when I taught there. I think I could teach eight hours that way. [Laughter and applause.]

DR. PEET: I think the remarks of the last speaker call for a reply. The teacher who has succeeded him has worked as hard, as constantly, vigorously, and successfully, as he himself did in the previous year. And the sitting of a teacher in our institution, when he is getting out every single particle of work, and when every nerve of the teacher is strained, and when he is taking the whole magnetism out of himself and putting it in his pupils, is not ordinary sitting. The pupil comes up and answers the question; the teacher's whole thought is concentrated upon him, and the teacher sits, perhaps, in order not to obstruct the view of his pupils. Standing is not work. The

imparting of the nervous energy and of the whole mind and putting it into the pupil is work. [Applause.]

MR. J. A. KENNEDY, of Illinois: There are different ways of looking at this subject. We change our classes every hour, and do not keep the same class all day. If we did, I think it would be a rather long day's work. Every hour we bring in a new class, which is resting to us. I think I prefer that to keeping one class. I had rather teach eight hours with that variety or change than to teach the same class for five hours. The teachers in our institution are also exempt from the slavish monitor duty at night. I had rather teach two hours in school than to take charge of the boys in their study at night. We are exempt from Sunday teaching, also, more than teachers are in other institutions, perhaps. In this way I can stand seven or eight hours' work as well as I used to five.

MR. NOYES: Can the pupils stand eight hours work every day?

THE CHAIRMAN: I have never had any observation in that.

HON. ERASTUS BROOKS: The pupils in our institution never spend eight hours a day in brain education; nor do I think they do in any other. They may spend four of it in the mechanical department, or two of it. The idea has been well expressed by the last speaker here, that we should give a variety during these eight hours of occupation. That variety may relieve both teacher and pupil, and in a well conducted institution it does relieve both.

MR. JAMES DENISON, of Washington (a deaf-mute): Two or three years ago I visited the New York institution, and in their school-room every teacher assured me that he found eight hours work too much; that he could not do eight hours continuous work and do it well.

THE CHAIRMAN: The next question in the question box is, "How can institution papers best help in the education of the deaf?"

MR. ELY: Everything helps in the education of the deaf that promotes their home life in the institution; their social, moral, and religious life. The institution papers should be in careful hands. It is one of the teachers of the institution; and as Dr. Fay once well remarked in speaking upon this subject, there is probably no teacher in the institution who has more influence than a well conducted paper published by the institution, which is read by the pupils. In the first place I would be very careful to tell what it should not be; I would be very careful that the paper should not deal too much in gossip; and I would be very careful that the home life is not invaded by the paper which is published. I would not rule out all personal matters, for children are interested in items about the people whom they meet every day and whom they know. They may be trifling to other persons, but they are of considerable importance to them, and may be a help in inducing them to read the paper. I would make very careful selections, to suit them to the intelligent pupil. We have quite a number of pupils, and to help them to read we must prepare matter for them, either selected or written; and it is an excellent way for the teacher of the institution to write short articles in language which they know better than anybody is best suited to the pupil.

Then I would have short stories, written by the pupils, occasionally published, after being corrected by the teacher, as an encouragement and reward to them. Then I would bring the paper into the school-room, and teach the pupils there how to read it; I would take it into the youngest class capable of reading short sentences, and have them

read and give the meaning of the paragraphs, and so in the older classes.

THE CHAIRMAN: The next question is referred to Dr. Gillett, and is as follows: "Are two heads ever beneficial to an institution?"

I have no hesitation in saying *never*. It is contrary to human nature. When two generals are best for an army, when two captains are best for a man-of-war, then, perhaps, we may say that two heads are best for an institution. That experiment has been tried all over this country, pretty nearly—certainly all over the East and Mississippi Valley; and as far as my information goes, it has been a failure in every case, and will be, I believe, until the advent of the millenium.

I know that my honorable and respected friend here, Mr. Brooks, the other day mentioned that in the New York institution they had two heads, and that he was satisfied with it. But he perhaps does not know as well as some of us know how there are little birds flying from institution to institution; and I have no doubt that if the officers of the New York institution were all present, and we could place them on the witness stand under oath, they would show a different state of affairs than that which he supposes to exist in that institution. [Applause.] If they did not, I would fall back on the fact which I believe to be true, that New York is the exception, and is the only place on this footstool of our heavenly Father where the people have sufficient of divine grace to enable them to do their work and exist in that way. [Laughter and applause.]

HON. ERASTUS BROOKS: Right here I may say a word in defense of myself. It has been a maxim of mine as far back as I can remember that "All of nature's differences make all nature's peace."

I want to say in regard to the Institution for the Deaf and Dumb in that city, that we have tried one-man power; and we have tried what my friend chooses to call the two-man power. A one-man power in our institution takes entire control of the educational department and everything which belongs to it. He is the Principal of the institution; and that is work enough for one man in an institution like that. The Superintendent, as I said the other day, takes charge of the material things. He buys what is necessary, he sells what is necessary, he looks after the farm and all produce whatsoever, and he takes charge of the boys and girls when they are out of the educational department. The two departments are entirely distinct. This enables the Principal to give his whole time to the education of the pupils. And it enables the Superintendent to give his whole time to the material business, and things which belong to the institution. The two things in my judgment are as the poles are apart. Now I shall accept the conclusion of my friend that, as we are eminently successful in the management of our institution, we have, by the blessing of God, that divine grace which enables us to do our work in that way. [Applause.]

DR. GALLAUDET: The other day, when Mr. Brooks was telling us about the management of the New York institution, he entered a saving clause, in my judgment. In speaking of this arrangement, and how well it worked, he said, "or the head of the domestic department might be subordinate to and governed by the head of the institution." There we have our idea.

During the last few months I have looked over papers relating to the very early history of the oldest institution in this country; and if I could relate to you *what I have there found*, proving what a *ban*

it is to have two independent heads in an institution, you would be surer than ever of the existence of that special Providence which has enabled the New York institution to go on under such a state of things. [Laughter.] In my reading and my experience I am satisfied of nothing more absolutely than I am of the fact that in regard to the management of an institution like those that are organized as deaf-mute schools in this country, the old saying of "where two ride the same horse, one must ride forwards," holds good. There should be, in my judgment, as a rule—although there may be these most benign exceptions once in a thousand years—one head to an institution; and where that head, presiding over the school operations as well as over the other operations of the institution, has the hearty coöperation and assistance of an able man who will assume the charge of the domestic department, a second head of the institution in all of its management, then I think, Mr. President, we may say we have an ideal management of the institution. But other than that, as a Director, as a member of the Legislature, or in any capacity where I should give my vote or my voice in determining the character of the management of an institution, I should certainly never dare to run the risk of the lightning striking twice upon this planet as it has struck in New York City. [Applause.]

THE CHAIRMAN: The next question in the question box is: "How much attention should be given to physical culture in our institutions?" This is referred to Mr. Chickering.

MR. J. W. CHICKERING, of Washington: The same time I spoke of as used in Washington; an hour a day in four days in the week. It has not been considered wise there to put in a certain time every day of the week, as the whole idea of the gymnasium was not to place anything irksome upon the boys. If they understood that at a certain time they must come to work at their exercises, they would not enjoy them. It was found that four times a week, an hour a day, or in the case of the young pupils half an hour a day, was not only wise, but necessary by many of the boys, as was shown by their going in after the month during which the regular gymnastic exercises took place. And there are some who prefer even to take those extra two days. But I think that in the colleges of the land where such exercises are carried on regularly, that an hour a day four days in the week is the usual limit assigned for class exercise.

I should say the proper time to take these exercises is after eating; and I think as near as possible after the mental labors of the day were over, so as to allow plenty of time to recover from the effect of the exercise before the evening meal. If the exercises of the school close at three o'clock, I say this exercise should commence at half-past three, if they have an hour after; if they have not half an hour before their meal, they should take this exercise as soon as possible after mental effort.

MR. NOYES: We have found it beneficial for them to take these exercises immediately after their study hour in the evening, before the pupils retire. We have but a single hour in the evening after study, at eight o'clock, and the boys have at least half an hour before retiring. I have found that to be a very convenient hour for gymnastic exercises.

MR. J. W. CHICKERING: I should consider that as an excellent idea, and in institutions where that would be convenient as probably the

best hour. In our institution the pupils sometimes wish to use their evenings for other purposes, and are not able to take their time.

THE CHAIRMAN: The next question is: "Has not the time come for 'The Annals' to be published oftener than once in three months? Could arrangements be made to have this periodical issued each month in the school year? This would increase its usefulness, and at the same time increase the interest in an exchange of ideas among instructors." This is referred to Prof. E. A. Fay, of Washington.

PROFESSOR FAY: I think that is a question that does not belong to the editor of "The Annals," or to any one, but to the convention itself.

THE CHAIRMAN: That is referred to the Executive Committee, or to the convention itself.

Here the convention adjourned until to-morrow, July twenty-first, at two o'clock P. M.

NORMAL DEPARTMENT, WEDNESDAY, JULY 21, 1886.

MORNING SESSION.

The Chairman, Mr. Ely, called the meeting to order.

Rev. Mr. McFarland offered the prayer.

THE CHAIRMAN: In the work of the oral section yesterday we were in the midst of a very interesting discussion when the hour for adjournment came. Therefore, we have taken up this oral question this morning.

Miss Richards desires me to say that she would like it if any persons have any questions to ask, or any suggestions to make in regard to what was presented yesterday in her paper, or the remarks that followed, that they would ask them now; and that the discussion may be carried on from that point.

MR. MATHIESON: I would like Miss Richards to explain how she conducts the breathing exercises which she referred to yesterday.

MISS RICHARDS: I spoke of giving the children, when they first came to me, exercises in breathing. We know that pupils sometimes breathe very irregularly, letting the breath pass through the nose and mouth at the same time, and breathing very shortly, frequently inhaling it slowly, and expelling it very quickly. I have each child come to me, and if it breathes through the nostrils in articulating, I take hold of the nose in this manner, and have the child inhale the breath as strongly as it can. Of course, it cannot inhale it strongly at first, and then have it exhale it through the mouth. Of course, a child cannot breathe forcibly at first, but in doing that, in closing the nasal passage and inhaling the breath, when the breath is expelled, the soft palate rises, and in that way is formed the habit of sending the breath through the mouth. I know that in ordinary breathing we should breathe through the nose, but to form the habit of sending the tones through the mouth without nasality, I give this exercise, and I give it for three months regularly, three times a day; after that but once or twice a day.

MISS TRUE: Do you help the children to observe the motions of the soft palate by the use of a looking-glass?

MISS RICHARDS: Yes. I have them observe the movements of the palate by a looking-glass, and also have the children look into each other's mouths. I want to impress it forcibly upon their minds that the soft palate must be kept raised, in order to have a clear tone and to avoid nasality.

MISS TRUE: How do you correct audible breathing?

MISS RICHARDS: I do not know that I ever had any to correct. How do you correct it?

MISS TRUE: I have not corrected it yet.

MR. A. S. CLARK: In teaching the letter "s," suppose the child persistently says "sh." How do you correct that?

MISS RICHARDS: I teach it first to bring the lips straight across the teeth. In "sh" the lips must be spouted. If I give "s" with the lips drawn tightly across the teeth, as in long "e," it will give a clear "s." I will change the lips after giving "s" for a time to spouting "sh," just by bringing the lips forward to give that sound.

MISS TRUE: I would like to ask if you do not find some children give the "s" much better with the tip of the tongue resting on the upper teeth than placing the tongue by the lower teeth?

MISS RICHARDS: I have never found it so. I have found that I get a better "s" by placing the tongue against the under teeth.

MISS TRUE: I find very often, where that is impossible, that I can get a very presentable "s" by placing the tongue just back of the upper teeth, and developing it from "th."

MISS RICHARDS: Professor Bell gives the position for "s" with the tongue right back of the upper gum. I think Miss Worcester, of Northampton, tells us that she gives "s," usually, with the tongue against the under teeth.

MR. ELMENDORF: I beg to differ entirely with Miss Richards upon the "sh" sound. A child can give the "s" as well with the lips in one position as in another. I have found that that makes very little difference. The whole difficulty is in the position of the tongue. If they allow any portion of the tongue to touch the roof of the mouth, and allow the little opening, which is necessary to form the "s," just back of the lower or the upper teeth, I do not care which they do; because I find that children sometimes get the "s" better with the tongue up, and sometimes down. Nevertheless, I do not compel the child to put the tongue up to say "s." If I find the child can say "s" perfectly with the tongue down, is not that sufficient? Therefore, I let the child say "s" in the way it can get it most perfectly. When they give the sound of "sh" for "s," it is because they do not curve the end of the tongue up and permit the breath to pass through the opening in the center. The moment that the middle of the tongue is raised too high it throws the end of the tongue down and the sound of "sh" is formed. [Showing.]

MISS RICHARDS: I noticed when Mr. Elmendorf was giving that sound, that he brought his lips into action, and gave the spouting of the lips very forcibly.

MR. ELMENDORF: But you did not get the "sh" sound.

MISS RICHARDS: I know that the position of the lips is changed and also the tongue.

MR. ELMENDORF: I do not say that the position of the lips is not changed in the "s" and "sh" sound, but I hold that the "sh" sound does not come from the lips.

MR. PORTER: I would suggest that, as mouths are not all shaped

alike, that the "s," in some mouths may be made better in one way, and in other mouths in another way. It can be made in both ways, and the shape of the arch of the hard palate is very different in different mouths, in some mouths it being nearly flat. And the shape of the teeth is different, as well as the size. All of those things make a difference, I should think, in regard to the manner of forming the "s." I think it is well known that ordinary speaking persons make it in different ways; some with the tongue high up on the palate, and others with the tongue below the lower teeth. I should think that the different forms of mouths should be taken into consideration.

MISS TRUE: The position of the tongue in "sh" being concealed, how do you give the child an idea of the position?

MISS RICHARDS: I have never had to give a child an idea of the position of the tongue. I give them the "s," placing their hand before my mouth while I make the sound. Before doing this I have given them a looking-glass, and taught them to hold their tongues down. I use the manipulator very little; I give these drills with the mirror, just to enable the child to get control over the tongue; and then, by holding the tongue down and letting the breath pass through the teeth, I get the sound of "s." If they can do that the other way, and without any extra drilling, I take it and am perfectly willing to. Then, if I can get the sound of "sh" in the same way, I get it; and if I cannot, I wait until I can get it. I do not direct their attention to the position of the tongue with "sh," because it is so concealed that you can hardly show its position. But I will say that I have seldom had trouble with "sh."

MISS TRUE: I always do. I very often have them give the long sound of "e," which raises the top of the tongue; and then, by placing a string across the tongue, asking them to give "s," lifting the top of the tongue and also elongating the center of the tongue—with a little practice I get a very good "s."

MISS RICHARDS: In what way do you have trouble with "sh"?

MISS TRUE: It is more apt to be "s."

MR. ELMENDORF: I have tried both of these ways; but sometimes even these will fail with "s." Another way to get it every time is, as I have learned from experience with a child I have taught in our school for three years, to have the pupil put the tongue right between the teeth, and then draw it straight back up against the teeth, and taking an ordinary toothpick, put it in between the teeth, and then the child brings the tongue up; and you can get a perfect "s" in that way every time. They cannot help making the "s" perfect. I object to any mechanical means whatever, as a rule; but it is necessary in this case, holding the tongue in the center, and it gives the "s" perfectly. The child will feel a peculiar tickling sensation at the end of the tongue. The child I first tried this with has been in school seven years, and she now gives the "s" perfectly. Put the tongue between the teeth first, and then put the toothpick right between the teeth, and tell them to put their tongue up in the position for "t." They get their tongue up, and then they make the "s."

MISS TRUE: I do it very often by having them give the "h" non-vocally, and bringing the tongue up, keeping the breath going all the time.

MR. ELMENDORF: As this seems to be one of the mistakes of our deaf-mutes, and there are a number here that are not so very acquainted with mistakes and how to correct them, I will stat

the most common mistake is on our vowel sound of "a," which is the compound sound of "ah" and "e." The vanishing "e" is very difficult for deaf-mutes, not only to get but to remember. I never yet have heard a deaf mute give that vanishing "e" properly. They can do it if you call their attention to it. Take the word "lady," and they say "lahdy," and "pah" for "pie." That is a very common mistake, and the children's attention should be called to the fact that it is "pie," and "nice," and so forth. I have heard that mistake with a great number of children; it is one of the commonest mistakes, and cannot be corrected too soon.

Another mistake is vocalizing consonants that should not be vocalized. This is a common mistake of deaf-mute articulation.

"Greenberger's Word Method" overcomes that to a great extent. I have heard better word speaking in the last three years in our school than ever before. I do not advocate that word method; I am rather undecided upon the subject; but it certainly does result in overcoming these compound sounds, vocalizing consonants which ought not to be vocalized. In correcting that I should simply impress upon the child that the "pl" must be formed against the back of the mouth; that the mouth must be in the position to pronounce the "l" the moment it has pronounced the "p." The position for the "l" must come almost exactly at the same instant the "p" is formed. I show him that I do not say "puly," but that it is "play." And the child soon understands that there is no vocalization. I always use words which come right in front of the mouth to show these things at first, and in that way the child overcomes that difficulty to a great extent. I have some pupils in the class that very rarely make that mistake; and if they do they are very much ashamed of themselves. They allow their organs to fall back to their natural position before they form the next consonant.

Yesterday Miss Richards spoke of writing the word upon the slate, so that they could have a written picture of all their words. I differ with her there, because I prefer to have the picture on my lips—to have them know the picture of all the words that they know upon my lips, not in writing or in spelling, because that simply increases their lip reading to a marvelous extent. If they have the writing upon the slate they will take some from the lips, but they prefer to have a lasting picture, and they will try to think of it as it is written; whereas if they do not have them written they must think of it from the lips, and it makes their lip reading very much quicker and more rapid. I hold that that is the reason I can speak to my children exactly as I am speaking to you; and upon all occasions I do so. I have had visitors come to my class who say that I talk to them exactly as I do to the children. I consider it a very high compliment to me, and I consider it a high compliment to the children that they are able to read the lips in that way. And I hold it is simply because they have nothing to fall back upon, as the words that they learn are not written. To teach the word "accident," for instance: I will go around the class listening, never looking at the children, because I might read their lips and they might deceive me. I listen to see how it sounds. Sometimes I send them across the room and let them speak. After they have that word, do I write it on the slate to show them how it is spelled? Not at all. They would get the word picture on the slate. But if I do not do that they get the word picture on my *lips* when I speak it. I do not approve of writing at all.

Some lady has asked me since I have been here, "Suppose you cannot get a sound, will you keep right at it?" No, not at all. If I try the child with a sound or word, and the child at the moment has the slightest fatigue, I drop it entirely and go to something else, because it is simply a disastrous thing to tire a child with anything, because that will be the end of them for a long time. I drop the attempt to get that sound entirely, and make no mention of it for a day or two, and bring it up again casually, and very often the thing I have been striving for and almost given up comes with the asking. Do not think you are going to fail if you cannot get something upon your first or second trial. Drop it and go on with something else, and afterwards come back to it again.

MR. WALKER: A deaf-mute present suggests to me that the most difficulty she has ever experienced in articulation is the combination "ch," or "tsh."

MISS BLACK: I do not know that I ever had very much trouble with "ch." Pupils can give that explosive by placing the tongue in the right position and expelling the breath on the back of the hand. I have had more trouble with the "k" sound than any other consonant. I have a little pupil in school who had a vocabulary of, I think, fifty-two words, and nearly all the elements and many of the combinations, before she could give the "k" and, of course, the hard "g" sounds correctly. One morning she came in with her face perfectly radiant, and the first thing she did after saying good morning, was to sound the "k." She repeated "k-k-k," and was greatly pleased to feel that she had succeeded in getting it.

MISS FISH: A child will often get the sound of "ch" from imitation. If it does not, I wait until it gets the most of the other sounds, and then teach it as "tsh."

MR. ELMENDORF: I have found that in doing that they are very apt to give the sound "tush." But if you get them to put the tongue back further, and still save the "t," they cannot help giving it correctly.

MR. WALKER: Would not they be more likely to give the sound of "sh" than "ch" when the tongue is put back in the center?

MR. ELMENDORF: No, sir; because I say the "t," and they can get the "sh" sound and the "t" separate, and then I put them together.

MISS RICHARDS: I would like to speak of the difficulties of combining "pl" and "tl" that Mr. Elmendorf spoke of. I have had trouble with pupils, but not recently, because I give these vocal gymnastics for a long time before the children begin to speak. I teach the elements and then combine them. Before they know or have any idea of what they are doing, I take a looking-glass and give to each of them a looking-glass, and we go through these exercises, and in pronouncing the sound "pr," for instance, I tell them to put their tongue against the upper gum and keep it there, and then to say "pr," "pr," "pr," not removing the tongue at all. And they never know that they can mistake. They never know that they can say "per" at all, and I teach "tl" in the same way. The "t" is made with the tongue broad, and I tell them to just narrow the tongue. They do not know what they are saying, or what is coming at all, but they get a perfect "tl," or a perfect "pl," and then I write it for them, "tl" and tell them it is that, and they are sure of it. The class that I have now, I think never have made a mistake in giving it "par." I cannot remember one. I just have them glide from one sound to

the other, and that continuation in that way they get simply, easily, and naturally.

MR. WALKER: Then you teach those elements along with other elements?

MISS RICHARDS: Yes, sir; the combinations "sk," "sm," and every combination that I can think of, I teach before giving it in a word.

MISS ELLEN BARTON: I think the position of the consonants should be taken before the voice is developed at all.

MISS RICHARDS: Yes, I think so. For instance, take the sound "pl." The tongue should be closed against the upper teeth before any sound or voice is given.

MR. PORTER: Can you not direct them to put the tongue in the position for "l" before they utter the "p."

MISS RICHARDS: I do that always.

MR. MATHIESON: I would like to ask whether a knowledge of the sign language, and a knowledge of the manual alphabet would not be of great benefit in the articulation work?

MISS RICHARDS: I think a knowledge of the sign language and articulation would harm no one, if he did not use them. You can know the signs without using them.

MR. MATHIESON: And in your work when you know a sign, do you hesitate to give it, in order to get at the result?

MISS RICHARDS: I think that, knowing the signs, you can understand children and their wants very much quicker. And very often, if a child forgets the word, for instance, if it has a whole sentence excepting one word, and cannot get that, if I can give the child a sign to make him think of that word, I give it.

MR. MATHIESON: That is the whole thing. I am glad we are so agreed. I thought when Mr. Elmendorf mentioned this morning that in teaching the word "accident" to his pupils, he did not write the word on the board, how could he explain it, except with the lips? The thought struck me how would the child know what "accident" meant if the boy knows nothing about signs? If we could explain in signs what "accident" meant, that boy would have a clearer conception. I would like Mr. Elmendorf to explain that a little more fully.

MR. ELMENDORF: Signs are not at all necessary for that explanation. I say to the child, "Did you ever see a horse-car run off a track and hurt somebody?" or, "Did you ever see a horse run away and hurt somebody?" The child might say yes, and I say that would be an accident. I say that to them just as I talk it to you, and they understand every word of it; and they will write it in their journals the next day.

MR. WALKER: How long will that child have to be in school?

MR. ELMENDORF: About five years. "Accident" is not one of the first words taught, although I should teach it if necessary.

MISS FISH: I will ask Miss Richards how she teaches the combinations of "r," how she teaches "dr," or "tr." I have found more trouble with those combinations than with any others.

MISS RICHARDS: I will ask Miss Barton to answer that question.

MISS ELLEN BARTON: With the "tr," I should in most cases induce the children, if possible, to leave the voice out entirely. As "t" and "r" the voice would come in on the following consonant. There are so many difficulties that I hardly know to what difficulties Miss Fish alludes.

MISS FISH: The combination of "d" and "r."

MISS RICHARDS: If a child gives a good "tr," I do not trouble myself about the "dr." They will get that after a time. If it gets a good "d" it will afterwards get a good "dr."

THE CHAIRMAN: We will now go to the subject of "lip reading." Miss Fish, I think, is ready to give a brief statement of how she conducts the exercises.

MISS FISH: I consider the subject of lip reading very important, and I teach it sometimes ahead of articulation. I intend that a child shall read words from the lips before it can speak well. In teaching I have many different devices. One plan I tried last year successfully, was to have each child take its slate, and I would give a list of independent words, that had no connection with each other. I found that in that way they improved very much, and that it was of very great help to them. Then I went on reading "do," "is," "it," and, perhaps, "strawberry," "Ely," etc., and they would get, perhaps, one hundred words in half an hour in that way. That was one exercise I had in lip reading.

MISS RICHARDS: Do you have your pupils write the elements before they begin writing words?

MISS FISH: Yes, they take all the elements from my lips.

MISS RICHARDS: Do you combine the elements before reading the words?

MISS FISH: Yes, they take parts of words and syllables from my lips.

MISS RICHARDS: And then, after that, do you give them short words, and then longer and more difficult words?

MISS FISH: Yes; although I often find that longer words are more easily taken from the lips than the shorter words.

MISS BLACK: I do not understand why lip reading and articulation are classed as two subjects. When we say articulation we include lip reading; we mean to cover the whole ground. The two are so closely connected that it seems to me we have little occasion to speak of them separately. The congenitally deaf cannot learn to articulate without lip reading.

DR. GILLETT: If that is true, why is it that some persons articulate quite well who do not read lips well.

MISS BLACK: I think this is seldom true of the congenitally or totally deaf. Nearly all of those deaf people who talk well and do not read lips well became deaf after they had learned to talk, or are not totally deaf. We have some good lip readers who are not good articulators. But the congenitally and totally deaf are obliged to learn lip reading in the first place. They are obliged to learn articulation by sight; they cannot get it from hearing. It is true that there are some exercises in school, that are called lip reading exercises, and we have others called articulation exercises, but the two are usually carried right along together.

DR. GILLETT: I would like to ask Miss Sparrow's opinion upon that subject.

MISS SPARROW, of Massachusetts: I think we should make a distinction between articulation and lip reading. We have more difficulty with those who are poor lip readers than with others, and we find that we need special exercises to develop lip reading.

MISS BLACK: That is very true; we have some that have never forgotten how to talk, and they come to us to learn lip reading. There are others that become very hard of hearing late in life, and learn lip

reading to assist their poor hearing. In such cases we of course make a specialty of speech reading, or lip reading.

DR. GILLETT: With congenital mutes, what is your observation as to the distinction between the two?

MISS BLACK: The congenitally, especially those who are totally, deaf make the best lip readers. With those who hear a little, the practice of speech reading is like trying to do two things at once. We depend a little upon hearing, and try to watch the lips at the same time. I have had a pupil, a business man, forty-seven years of age, who had become gradually deaf, and now is very deaf. He came from a distant western city, for the purpose of taking lessons in lip reading, to assist him in the practice of his profession of law. At the end of six weeks he attended service on the Sabbath. He sat quite near the pulpit, and he afterwards said to me that he did not think he had lost one sentence of the sermon. He said: "I do not think I have heard more than about one third; the rest I obtained from lip reading. That was the benefit of it to him. He used to test himself by holding his head down so that he could not see. I commenced with him by not using my voice at all; talking simply by the movement of the lips, confining the exercise entirely to that; just as we do in school with pupils who have some hearing, almost always speaking in very low tones when addressing them. We do not care about training their ears so much just at this time. After some proficiency in speech reading has been obtained, it seems best to gradually fall into the ordinary conversational tones; but I have had them tell me that it was much more difficult to read the lips when some sounds or words could be heard.

MR. I. N. TAIT, of Missouri: I desire to ask how you succeed in teaching congenital and semi-mutes? Which is the more rapid, and which the more satisfactory? I refer to both lip reading and articulation.

MISS BLACK: I would have to make a difference there. The congenitally and totally deaf make the best lip readers every time and learn it more quickly, other things being equal. Those that have once talked or have some hearing, be it ever so slight, have pleasanter toned voices; and enunciate more readily, but often more carelessly.

DR. GILLETT: Have you never met some congenitally deaf persons who spoke well, and yet did not read lips very well?

MISS BLACK: Yes, sir; I have met with a very few. It is said by many persons that speech reading is a gift, and cannot be cultivated to any great extent; that it is not so much a matter of cultivation, as a special gift. It is to some a natural gift, as many other accomplishments are. Some persons are naturally much more minute observers than others, but that does not prevent the obtaining of a great deal by cultivation. If one has the natural gift so much the better. If not, one can still obtain a certain proficiency without it.

A MEMBER: Did you ever see a congenitally deaf-mute that could not be taught articulation?

MISS BLACK: No, sir; I have not. Of course we are not now considering those that have defective sight, and those that are deficient in mental capacity.

MR. CROUTER: I would like to have Miss Sparrow give an explanation of Miss Worcester's method of teaching vocal physiology, as I think her's is a very satisfactory method.

MISS SPARROW: I think that is too important to be explained with-

out preparation. In a hasty explanation I should be liable to make mistakes. I should like to call attention to a paper which Miss Worcester has published in the January number of the "Annals" for 1885. In that paper a chart is given, and some explanation of it, but not just what you desire. The title of the paper is, "How shall our children be taught to pronounce the written words of the English language?" I think that chart and explanation would be of great help to many who are not acquainted with her teaching.

DR. E. A. FAY: Miss Worcester has promised to develop that subject further in the "Annals."

MISS RICHARDS: I desire to ask Miss Sparrow what special drill she has to develop lip reading.

MISS SPARROW: We have at times such exercises as these: We take a great variety of words, or combinations of words, which the child does not know, and give them rapidly, and the children compete to see who will read the words correctly and write them on a slate. We do not depend upon the child's pronunciation of it, as, the pronunciation being imperfect, we are not sure that they understand it. In reading exercises, I always take two, three, and sometimes four sounds in contrast.

MR. WALKER: I would ask how many you have in a lip reading class, and in what manner you give the whole class exercises; that is, when you are teaching one child a difficult word, what are the other pupils doing; do they take part in the exercises, or are they left idle?

MISS SPARROW: There is a great variety of ways in doing that. We have half an hour in all the classes, in which the teacher goes to Miss Worcester's class-room, and work is done with Miss Worcester and the teacher of the class, so that one half of the class will be occupied with Miss Worcester, and the other half with the regular teacher. Eleven is the largest class which I have had; but fourteen, I think, have been taught successfully; that is, with a great measure of success.

MR. WALKER: That would give seven to the teacher in the special drill. The number that we prefer is ten in the other exercises. In the articulation exercises we keep the children at work oftentimes in pronouncing the list of words which he has already made; pronouncing them over and over again to himself.

MISS RICHARDS: I will ask Miss Sparrow if the teacher gives her own lip reading exercises, or if Miss Worcester during the special drill gives lip reading exercises?

MISS SPARROW: Each teacher gives her own. The time of Miss Worcester is too valuable to be spent in lip reading.

MR. WALKER: In giving a class the lip reading exercise, supposing one pupil cannot understand the motion of your lips, must you stop and pay attention to that one pupil, and is the time lost upon the others?

MISS SPARROW: No, sir; we do not stop to give attention to one. It is a rapid exercise, and the children who do not get it try harder next time. It is not worth while to stop for one child. That is the way I do.

MR. ELMENDORF: I would like to state that every teacher in our school must be an articulation teacher. From the first day a child enters the school until the day it leaves it must be under the instruction of an articulation teacher. We have new teachers who must be trained, and are under supervision; but they have to teach articula-

tion, every one of them. Our classes range from twelve to seventeen, I am sorry to say. Everything in the school is done by lip reading, and everything is done in articulation. The children stand in front of the teacher, and the teacher speaks a word, and if the children do not get it it is spoken again. If any child does not get it I stop the drill once or twice for that child, but it would not be fair to the majority to stop too long with one child. I stop as long as I think it is fair for that one child—as long as I think it is fair to the others. If the child does not get it then, I bring it up at some other time. Every lesson is given in articulation, even in the reading hour in that way, and if there is any correction it is given. Everything is a means to an end, and that end is speech and lip reading.

MISS ELLEN BARTON: I would like to say that in any exercise which is for lip reading purely I had as soon teach twenty-five children as five.

MR. WILLIAMS: Would you have larger classes in lip reading than you would in articulation?

MISS BARTON: Decidedly.

MR. WILLIAMS: What number do you consider one teacher can profitably teach articulation?

MISS BARTON: One pupil.

MR. WILLIAMS: I understand Mr. Elmendorf that articulation and lip reading were in every exercise in school. But I would like to ask if he does not have a time when the special thing is articulation, or is lip reading?

MR. ELMENDORF: There are several times. There come five or six times a day, five or ten minutes at a time, when specially difficult words are articulated for the children. Suppose it is grammar, or reading, or language, or any other lesson; there are a few minutes taken out of that lesson to teach the difficult words that have been mispronounced. And this is done all of the way through the school day, up to the highest class. In history I will take five or ten minutes from that lesson to give them a few words which they do not understand, or do not articulate or pronounce well.

MR. WALKER: I would be very glad to hear how Miss Barton conducts her lip reading class of twenty-five.

MISS BARTON: That would depend entirely on the age of the pupils. If it were simple exercises with young children I should have a great number of sentences, words, and elements written upon a slate. I would have some one child find a sentence and give it; and if the child upon the floor failed to do it, I would allow another to give it as quickly as possible, and so keep up a feeling of competition between them. In the older classes I would do it in very much the same way, though perhaps they might be reading from my lips instead of hunting for it on my slate. Working on the wall slate one child works at a time; but the twenty-five are at work as much as the others.

DR. PEET: I would like to ask of some of these ladies and gentlemen, who have been teaching articulation, whether they have ever found any benefit from Mr. Lee's method of designating letters, in primers. You know that he puts, in special print, silent letters, long and short vowels, etc. I would like to know if those books have been used at all as reading books in teaching articulation.

MISS BARTON: We have not used them as much as we intend to in the future. I like the principle.

MR. F. D. CLARK: I would like to ask Miss Sparrow if she would

give us some little explanation of the elementary system. It is a system toward which I think I am tending, and I am very much interested in it. I would like a sketch of the first few months of a child's instruction.

MISS SPARROW: I do not teach the youngest class, and I have only had the practice that comes in taking classes from the youngest up, and correcting their errors of speech, of articulation, and other work.

THE CHAIRMAN: The next subject to be considered is history. And the proceedings will be conducted by Mr. G. B. Goodall, of the California institution.

MR. GOODALL then read the following paper:

HOW TO TEACH HISTORY.

Mr. President, ladies, and gentlemen: When this convention met I had no expectation of taking any active part in it, but for reasons best known to the courteous committee, I have been asked to strike the tonic chord of to-day's topic, and then let the more experienced and better prepared execute the symphony. Having had barely time to write down my own thoughts, I have not been able to fortify myself with reference to authorities, so what I have to say will be simply the expression of my own ideas, right or wrong. I must, therefore, beg you to be content with a few assertions, which may be enough to provoke discussion, but which, in this paper, I cannot adequately support. But I am sure there are several gentlemen present, with experience in their practice, and literature in their pockets, sufficient to set me right if I am in error.

I believe that history is a very important part of education, and that the idea, entertained by some, that it can be learned at any time and in any manner, is erroneous. No matter what the profession is, other things being equal, the one who is well versed in history will be the better man. Education does not consist in learning to do one or two things, but in developing, forming, and shaping the mind; and, though history may not add largely to our knowledge in the direction of our special life-work, it stimulates thought and broadens our intellectual range in a manner that no other study can.

There is no doubt that most children hate history, and as little doubt that they have reason to hate it, when we examine the textbooks and the manner in which it is generally taught. Undoubtedly there are teachers who are not following in the old rut, but, having solved the problem in their own minds, are quietly pursuing better methods. Think of Bancroft, Knight, Gibbon, Hume, Motley, and a host of others! If to gain a knowledge of history is to learn what they all contain, then indeed is it a task that well may appall a child. But children ought not to hate history, for history is a series of tales about human beings, and human beings is the theme which the child likes best. What child will not listen attentively to a well told tale? Some may say that children like fiction better than fact, but I doubt it. Tell a child a story, and when you have done tell him that it all really happened, and observe now pleased he will be and how eagerly he will ask questions about it. Tell him another, and, having done, tell him it is not true, and note his disgust. You will thus see that children prefer fact to fiction. How often we hear a child say, "Please tell me a true story!" Make history as attractive as a novel or a newspaper, and children will pursue it with the same zest. Since we have

now shown that history is an important study, and that children's repugnance to it may be changed, by judicious methods, to a love for it, we will next try to explain how it should be undertaken.

It seems to me that in the study of history there are four periods to be considered which correspond to the four phases under which the subject may be regarded. We may think of history as the life and doings of a nation, as biography is the story of an individual's life; and as the life of an individual is made up of a few important acts and crises united with much that is less important, so the history of a nation is composed of important events and epochs scattered along the more uneventful plane of its life. This is the *Story* view of history.

Again, these events may be regarded as strategic points, or joints in the skeleton of history, and arranged in chronological order, often have little connection with those which stand beside them, except in point of time. But as a frame, or skeleton, is necessary to every substantial structure, so is this order necessary as a groundwork of historical study. This may be termed the *Strategic* or *Skeleton* view.

We see again that events of like character occur at different times. Take the agrarian legislation of Tiberius Gracchus, for example. In studying history this seems out of place. It is unlike anything that stands near it, before or after. It is a land question, and as such, is as modern as Home Rule, and might be grouped with all land questions, ancient or modern. With this view the facts of history may be paragraphed, as it were, and studied in groups. This may be termed the *Group* view.

Fourthly, a deeper and more philosophic consideration will lead to tracing out the development of the spiritual and social relations of human beings in society. If there were no growth there could be no history, for there would be no change, and history is only a record of mutation. But there is a growth that is unseen, except in its effect upon society. There is a development which cannot be seen by the eye; it is immaterial. If every material development of these United States could be ground to powder in a moment, and its people remain unharmed, there would still live the grand ideas of liberty, religion, and economy which have been developed during the past century. This may be called the *Spiritual*, *Social*, or *Philosophic* view.

Thus, you see, I would plow this historic field four times, and each time I would plow it for a single purpose corresponding to one of these four divisions which I have given. Naturally we should have four courses, going over the same ground, and which might be called *Story Course*, the *Strategic* or *Skeleton Course*, the *Group Course*, and the *Philosophic Course*. I do not mean the materialistic form of philosophic history which is in vogue, and which I do not believe, for it seems to me that other factors besides matter and motion enter this great product.

Spencer says, "There can be no correct idea of a part without a correct idea of the correlative whole." This may be generally true, but we certainly can learn some of the individual facts before we can comprehend a series. I would proceed from the individual to the general, that is, I would study general history last. As many pupils cannot study more than the history of their own country, this seems to me to be the history to begin with. General history is often given next, but it is hard for the pupil to follow so many threads at once, and confusion and discouragement is the usual result. It better be

studied after the imagination and the memory have been trained by stories and chronology. The history of the United States being finished, let that of England and perhaps of France be followed out. Of course, details depend upon the extent of the work that can be done, but I would put United States, English, and ancient history before general history. Let us ask what a pupil needs most. If he has little time and cannot do all that is desirable, without doubt the events of the past one hundred years are the most important to him. So much as to the *order*, and we come to the *method* of study.

In a school, in connection with other studies, instruction in history may be begun at the age of nine, and in some cases earlier. I say instruction advisedly; I do not mean *study*. The child now enters upon the *story course*. A mother teaches the stories of Joseph and Samuel to the great interest and delight of the child; and the stories of Captain John Smith and Luther can be as easily taught. There are but two requisites of success: the teacher must himself *know the story well*, and he must *have the ability to tell it* so as to excite interest. In speaking schools, I have met with better success in this than in any other way. The teacher must prepare himself, and these histories that are so much like arithmetics, will be of no use here. This course is largely biographical—a series of stories about the important characters, to quicken the imagination and store the mind with incidents and associations that will make a lasting impression upon it. There is no necessity of place or order in learning these stories; their arrangement will come in the skeleton course. I should say that two years, and, perhaps, more, might be spent in this manner. This knowledge is gained without taxing the strength or wearying the attention of the pupil, and is a source of recreation and pleasure.

At eleven or twelve the pupil can receive more substantial food. He is old enough now to understand some of the relations of cause and effect. He has had the story of the Boston "tea party," now he can have the affair at Bunker Hill. A pamphlet should be made by the teacher, to assist in recalling what he has been taught. Some dates must be memorized, and the order of events must be observed. All of the pupil's knowledge must come from the teacher. It should not be forgotten that three fourths of the time spent in learning, or trying to learn, a hard lesson, is thrown away. The rest may be spent to *some* purpose, but the victim sticks at hard sentences, talks, and thinks how his club will defeat the Kick-hard Club at the next game of football. The system here proposed does not leave the pupil to his own thoughts. It takes hold of him, and sets him at work in the right direction. In this manner two or three years may be employed.

The pupil, now fourteen or fifteen years of age, may enter upon the group course, and, with the aid of various books of reference, *study* all topics that belong to the same group, stand where they may chronologically. Here the first *study* begins, and if the previous work has been well done, this course will be most interesting and profitable.

Of the fourth, or philosophic course, nothing need be said, except that it should be pursued in the same manner as the third course, with the aid of books of reference, each topic being worked out separately.

In all this work, the aim should be to kill two birds with one stone. Of course, the work in all these forms is to be written, corrected, and copied with the greatest care. Attention to paragraphing, r

tion, and other matters pertaining to thorough instruction in English, will thus be most effectively taught.

I believe in accurate work. One can endure being called narrow-minded because he insists upon a comma being a comma, if he has some object in view, and knows clearly what it is. This so called secondary education has an all-important effect upon the higher education, and if accuracy is not learned when young, it never will be learned. Inaccuracy may be tolerated, but it should be deprecated in the great affairs of life, and is ill suited to ordinary business. If words are to be written, they should be correctly spelled; and if sentences are to be constructed, they should be properly punctuated. To this rule there should be no exception. If a thing is worth doing at all, it is worth doing well.

MR. GOODALL: I have done some of this work in my room during the past year, but not with pupils who have taken the courses that I have suggested, in this order. It is a miscellaneous class. I propose to read to you one sentence from six books, which sentence, expressed in six different ways, is supposed to convey the same idea. This will show you how the work is done. The writers of these sentences are, three of them, semi-mutes, and three congenital mutes.

MR. G. O. FAY: What is the standing of the class; how many years?

MR. GOODALL: They are from fourteen to eighteen years old, and they have been in school, some of them five years, some seven, and some eight. The subject was "The Mound Builders." We have no text-book which contains anything about it. What the class have written was taken from my telling them a story, simply, and these were not written down on the day on which I gave it. I told it to them in signs, and if I used any words which they did not understand, I explained. Of course, the whole subject is written upon, but I will only read one sentence to show you that it is the deaf-mutes' own work. I have not corrected it so as to make first class English of it, by any means, but I have corrected it so that it is fairly intelligible.

I will first read the sentences of three congenital mutes. The idea is that a nation lived here before the Indians lived here:

"Before the Indians lived in the country which is now called America, a race of people, about whom we know very little, inhabited it."

"A great many years ago a race of people lived in this country, which is now called America, before the Indians, who were living here when it was discovered by Columbus."

"Long before the Indians began to inhabit the country of America, a race of people, of whom we know very little, lived here."

"Long before America was discovered, and before the Indians inhabited the country, there dwelt in this country a race of people."

"A long time ago, before this country which is called America was inhabited by the Indians, a race of people were living in it."

"Many years ago there lived a race of people in this country before the Indians inhabited it, and before America was discovered by Columbus."

So, each sentence, containing the same idea, will probably be a little different in the whole twelve who compose the class.

DR. PEET: How did you give this information? By spelling, writing, or by signs?

MR. GOODALL: In all three: I conveyed it to them as best I could.

MR. WEED: Is that an ungraded class?

MR. GOODALL: It is not a strictly graded class; the class was graded by ages more than by knowledge.

MR. WEED: Have those particular sentences been corrected in any degree?

MR. GOODALL: They were first written upon a slate, or upon common paper, and read, and if there was any expression in them which would lead them to be misunderstood, I corrected them just enough to make them intelligible. I have not tried to make them perfect by any means. This is not a daily exercise, but three times a week, and we do not devote any other time to the study of history.

MR. MARSHALL: Do you use any text-books in the advanced division?

MR. GOODALL: For the last two courses, when they study what I have termed here in my paper the grouping form, or the philosophical form, of it, I use all of the books I can; but for the story course, and the skeleton course, no books. The teacher furnishes all of the information.

MR. MARSHALL: Do you aim to make your lesson on history also a lesson in language?

MR. GOODALL: Yes, sir; we try to kill two birds with one stone.

MR. CROUTER: Do you teach all of your lessons in this way—in signs, and in writing, and in spelling?

MR. GOODALL: Yes, sir.

MR. WILLIAMS: I believe you said that in the first division you would begin with children eight or nine years of age. Did you mean deaf-mute children at that age?

MR. GOODALL: Yes, sir.

MR. WILLIAMS: As soon as they enter school do you begin the historical studies?

MR. GOODALL: The children enter this institution at the age of six, and they have been in school then about three years.

MR. WILLIAMS: You would occupy about three years with the first division, and about two or three with the second division, about the same length of time with the third, and so with the fourth. That would make ten or twelve years of history.

MR. GOODALL: Yes, sir; but only in connection with other studies, twice a week.

MR. WILLIAMS: How would you manage in case you could keep children but six or eight years in school?

MR. GOODALL: I would begin just the same, and let them study those courses as far as they could, because it will do them more good than it will to take an extensive course which is mixed up and which is very imperfectly learned.

DR. PEET: I will ask if in the instruction in this institution it is usual for the teacher to take a class and to teach it everything, or whether the same class comes under several teachers during the day? Do you in teaching history, for instance, teach several grades or classes, or do you confine yourself to one grade?

MR. GOODALL: I confine myself to one grade. The pupils remain in a certain room or class until they are supposed to have advanced far enough to pass into another room.

MR. McDERMID, of Iowa: I would ask your method of making corrections; whether you correct the papers or lessons yourself and have

the pupils copy them in their books, or point out the mistakes and have them make the corrections?

MR. GOODALL: If a boy has presented a page of what I have given him, I first pass along the line at the left margin, and make a cross opposite each line which contains a mistake, and give it to him. He reads and corrects it if possible. I then see that there are some words which he cannot correct, and perhaps I underline them, or I tell him that such a sentence contains the wrong idea. If he has said that Columbus sailed across the Pacific Ocean, I tell him that cannot be; that is all I tell him, and he immediately sits down and perhaps corrects his mistake at once. I try to have a pupil correct everything he possibly can, and those he cannot correct I help him at.

MR. METCALF: I would ask Mr. Goodall, in an institution where the course was limited to eight years, how many years of that time he would devote to the study of history; or if he would devote as many years as he has indicated?

MR. GOODALL: I would teach history during all of that time, from the time he was capable of taking it, to the end. But I would limit the amount of time given each week, to suit my own purposes. There need not be more than one lesson a week if the studies are crowded.

MR. WHITE: How do your pupils in history recite? Do you require them to commit the lessons to memory, and write them out in full the next morning?

MR. GOODALL: In teaching history in this form, the only way that they recite is, to present their papers. I review occasionally, by asking them some question, such as "Tell me something about the mound builders," and they will go and write out what they know about it. There is no time spent in oral recitations.

MR. BOOTH: Do you never write lessons for them? Do they commit their own lessons virtually, by reviewing them and reading them over as you have corrected them; or do you go through with them, and write them out complete lessons for them to memorize?

MR. GOODALL: I never write out complete lessons. Sometimes, if the subject is a little difficult, and they find difficulty in expressing it, I give them one, or perhaps two or three different ways of doing it; then I erase it, and have them express it in several ways. And perhaps they come up with a way which is entirely different from what I have given them.

MR. J. A. McCLURE, of Nebraska: What do you say for having it for an evening study.

MR. GOODALL: I would not give this lesson for an evening study, because it would not be well done. I prefer to have pupils write it in the class-room before me.

MR. BOOTH: In what way do you give language lessons correctly, if not in history?

MR. GOODALL: I do correct the language of the lessons in history. As I have an advanced class, I am not really teaching language by itself. I am only using the history as a means of advancing them in their language.

MR. TAIT: Do you ever find it profitable to have lessons recited topically; that is, to give a lesson to-day, and require the pupils to-morrow to come up and state the topic of the lesson, as nearly as the signs will admit?

MR. GOODALL: Sometimes, after a month's study I have called up

the pupils and asked them to give me such and such topics, and they have given them before the class.

MR. TAIT: Do you find that that gives them a very comprehensive view?

MR. GOODALL: Yes, sir.

MR. TAIT: Do you ever have your pupils recite wholly by means of the manual alphabet, and without any writing?

MR. GOODALL: I have done so; some lessons.

MR. TAIT: If a pupil answers your question correctly, and another one says he knows a different answer to it, and he supplies an answer in almost the same language, do you give the second pupil credit for an original answer?

MR. GOODALL: I do, and I find it an excellent drill.

MR. TAIT: Do you find that, when a class is a little inattentive, to call upon the whole class for an answer, word for word, is a profitable exercise, and secures better attention than any other?

MR. GOODALL: I have not practiced that, but I always have some means of getting the attention of my pupils, if possible. I would say here that I disbelieve in class teaching. There is but one way to teach, and that is one teacher to one pupil, and the nearer I can bring my class work to that individual work, I believe the better work I can do. Dr. Franklin said, "One boy is a boy, two boys half a boy, and three boys no boy at all."

DR. LATHAM: I understand you commence this course at an early period, say two or three years.

MR. GOODALL: Yes, sir.

DR. LATHAM: What knowledge of geography have they at that time? If you speak of America what do they know of it?

MR. GOODALL: I do not care about their knowing when or where this story occurred. They commence their geography in the second course, which I call the skeleton course.

DR. LATHAM: But you are teaching this story before they have a knowledge of geography, without which the story is of no advantage.

MR. GOODALL: I exclude that. The first course of two or three years I regard as simply a course to put into their minds a few facts independent of geography.

DR. LATHAM: I do not believe in that. I think they ought to know geography first, and they ought not to take up the study of history until they have a complete knowledge of geography, or sufficient for the history of the country which they are studying. For instance, what use is there in studying the history of the United States if they know nothing of the geography of the United States?

MR. GOODALL: Most children who learn the stories of the Bible on their mother's knee know nothing of the land in which those things occurred.

DR. LATHAM: It has been the custom for forty years or more to teach geography before history, it being considered that a pretty fair knowledge of geography is necessary to the proper study of history. I know that some teachers write out sketches according to your description, and tell stories. But as a matter of history I think they have no real value at all, until they can locate the events and the people who are concerned in history. Therefore I think that the study of history should not be undertaken before the fifth or sixth year, and that antecedent to that they should have a complete knowledge of geography.

MR. GOODALL: That knowledge, it seems to me, will be in its proper place in the second course I suggest, in which I begin to place dates and places, and so arrange my whole skeleton. Then I begin to clothe it with those stories which they had learned long before. I put them then in their proper place.

A MEMBER: What lessons do you give your pupils in language?

MR. GOODALL: I am obliged to give them some lessons to commit to memory, but I do not believe that it is right. I believe that the physiological method of teaching is almost wholly overlooked. To commit a page to memory is the hardest work that I can do. Many teachers give the pupil a lesson to be committed to memory, at night, when the pupil is less able to do it than in any part of the day. I never give a pupil a lesson to commit to memory at night, if I can avoid it.

MR. McDERMID: I would like to ask, in the use of text-books, what methods you use in explaining a new lesson?

MR. GOODALL: I do not use text-books in a class-room. I would send them to the library to find the facts, after giving them a hint of where they would find them. I would let them find them themselves, and write out what they get on paper, and present it to me. They have an exercise in English, and in history, and I would correct in that way. They have then reached a point where they can begin to help themselves. This is study. All that has been before has been given by the teacher; it is not study, it is instruction.

MR. WILLIAMS: How do you accustom them to the use of text-books?

MR. GOODALL: I tell them that, for instance, the battle of Bunker Hill is described in certain books, and I let them go and read about it.

MR. WILLIAMS: In what period of your course is that? In the skeleton?

MR. GOODALL: No, sir; I would have that in the second course. I do not use text-books until they have studied from four to six years, and have been in school eight or nine years. Everything that they do in history is written out, like English composition. And I make them correct it themselves, if possible, and then copy it carefully into their books, like a composition.

MR. WILLIAMS: Do you find that deaf-mutes are at that age able to get any help or instruction from the text-books, when you get to that point, to go to the library and select the books for themselves, after you have given them an indication as to what the books are, to go to those books, and hunt up the subjects that you wish them to look up?

MR. GOODALL: Yes, sir; I find so in every case; that boys thirteen or fourteen years old can do that. He may do it imperfectly, at first, and give you a very poor exercise several times, but you will find that he will be able to do it very shortly, and you will be surprised to see how well he will hunt up and develop a subject for himself, after two or three months. And that I consider is one of the great things to be taught, how to get things from books.

MR. WILLIAMS: I think that is the most important thing you can teach; for if they are going to improve afterwards, it must be through books. But the question, in my mind, was whether it was not necessary to use books more in the class-room, to teach them how to use them there, in order that they should get that knowledge and be able to use books freely after they get through school.

DR. PEET: Mr. Williams loses sight of the fact that these, after all, are quite young. The children here begin at the age of six, and when they have been here eight years, they are fourteen years old—younger than most of the children at our institutions at that time. And perhaps, in the life of a deaf-mute, fourteen years would be about as young as you would expect them to use books freely.

MR. WILLIAMS: Yes, sir; fully as young. But the question was, how they could jump right into the books at once, without help.

MR. BOOTH: Up to this point, until they use text-books, and until they are put into their hands, do you observe, in giving them lessons, the chronological order of events, in any way?

MR. GOODALL: In the first, the story course, I would tell them the story of John Smith, and that it happened in the early years of the history of this country. I would tell them how General Putnam rode down the stone steps, and that that occurred much later. And, as Mr. Latham suggests, I might tell them something about where it occurred; but I would not insist upon it. The object now is not that. But in the second course, I would give, as I say, certain dates here and there, and begin to clothe my skeleton with the stories which I had given them, and to locate them.

MR. BOOTH: As to dates, do you not find that your pupils learn dates very readily, and yet show evidences at times that they do not understand what dates mean? That is, the occurrence of events relative to one another in time? That they will get George Washington before John Smith, and Abraham Lincoln before John Adams? That they will show that they do not know that one event is past or future, as relative to another?

MR. GOODALL: Yes, sir. But I often have some means of showing the relation of those things. What you say is true, of course. We shall meet with all these difficulties. But a date here and there is necessary.

MRS. MARWEDEL, of San Francisco: I am sometimes asked how we impress our children with the facts of history, in the kindergarten. For instance, taking the people who lived in this country before we came here, we show them a picture of the Indians, show them the tools they use, and give them a description of their past and present life. Then the children draw. We have had children six years of age who have drawn all of the implements and weapons used by the Indians. Then we make them out of mud or adobe, and we build them of little sticks, just imitating the Indians. Then, finally, we use the center table, and we form out of the sand, hills and rivers, and give them an idea of the country in which those people live. That is the first start; and the same thing is represented in stories.

Professor Preyer, professor of psychology and physiology in Germany, has published a work which I am about to translate, which gives the subject wonderful interest to the mind of the child, and the child works it out himself. And I think the teachers of the deaf and dumb know the value of this by experience, that what the child can develop by his own mental activity is never forgotten.

DR. PEET: What is the title of the book that you mention.

MRS. MARWEDEL: The author of the book which I am translating is Prof. W. Preyer. The title of my book will be "Childhood's Poetry in the Study of Life and Forms of Nature." And with it will be connected a drawing book.

MR. METCALF: I cannot agree with Mr. Goodall in all that he has

said in regard to the teaching of history. I do not think you should begin the teaching of history until the fifth year. In our State pupils are only admitted at ten years of age, and I think the first years of their lives should be given to the teaching of language; and that you cannot begin teaching history before the fifth year, and then cannot give more than two years to that subject, for more important matters should be taken up.

MR. GOODALL: I make the teaching of history a language study all of the time.

MRS. MARWEDEL: We have found the historical pictures published by Brown most valuable in teaching history, and other subjects. They are very interesting. They show the pictures of the birds and animals of the different countries, so that you see the wild animal just where it lives, surrounded either by mountains or water, and then the name of the country is marked upon them.

MR. MARSHALL: I have tried various methods of teaching history, and while I agree with Mr. Goodall in many respects in regard to his manner of teaching, I agree with him entirely in the early stages of his teaching—that is, by telling stories, by eliciting the attention of the young pupils, and by having them try to write out in their own words the facts given. But as the class advances in history I think it is well to have well prepared text-books to assist in the teaching. I am very careful in my selection of text-books. I do not depend upon the same text-book entirely. I give lessons from signs and from the board. And I do think it is much better for the advanced classes in history to have some text-book where the facts of the lesson can be presented succinctly, and found easily. If you send a class to the library to find certain facts which are trifling in themselves, but essential for the instruction of the class, you lose time, and the pupils become absolutely discouraged. But with a text-book they would search out these facts and present them to you. You would then look over the lessons and correct them where there are errors; or the pupil may correct them himself. In that way there is information imparted in history, and also instruction in language. The pupils are learning in two directions. I cannot see why this objection to text-books is insisted upon. I have used text-books with a great deal of success.

In regard to the time children should begin the study of history, I think a great deal as Dr. Latham does, that it is better for children to be well grounded in geography before they take up the study of history proper. We generally take up history in the latter years of the course, say the fifth year. We teach them geography from almost the very beginning; and at about the fifth year our classes begin the study of history—generally the geography of home at the first. And, in that way, we think we give them very good information for the time they are in school upon the general subject of history.

MR. A. S. CLARK, of Connecticut: I do not know that I have anything to say of special interest, but I can give my own experience. And depending upon that, I must say that I differ entirely from Mr. Goodall in the method I think history should be taught. As to the importance of history, we sometimes see that disputed. I have seen within the past year, in some of our deaf-mute papers, the question asked, "Why should we teach history?" I am surprised that such a question should be asked. I think it one of the things we are called upon to do—to instruct our children in things that have been done.

As to when the study of history should be taken up, in our institution I think I may say we are about ready for it at the beginning of the fifth year. Of course that will vary. A certain class, especially bright, may be ready at the beginning of the fourth, and another class not until the beginning of the sixth year; but the fifth year is about when we place it.

It presupposes that during the preceding four years of the child's school life he has been over, substantially, all of the forms of language so that he has a great many ideas; and that he can express those ideas in good, fair language. Now, what shall we do with him? Shall we build a wall about him and place him in a well, as it were, by keeping him confined to the school limits of the institution; or shall we make all that he has done a ladder or stepping stone to a vantage point from which he can see and get his horizon enlarged. I think it is our duty to our pupils to do this. I think it is our duty to instruct our children in the idea that not I, or my teacher, or this institution is the center of everything; but that there are things outside of this teacher, or this institution; and that this is but a fraction of the great world. And how shall we do this? By confining him to the things about him? No. But by introducing him to the things that have transpired in the world. I say that the study of history is necessary, in order that the child's horizon may be enlarged; in order that he may be a good citizen.

The study of history is a help in the study of language, and in the enlargement of the child's vocabulary. The child must sometimes deal with books and with papers if he is to be a part of this living world. How shall we prepare him for this? Shall we give him the simple language which he understands and which the teacher knows he understands, until his course is done, and then send him adrift into the world? No. We must, under our profession, start him in that line of work which will fit him for taking hold of the books and papers from which all his life he shall get the information which he needs. The safest way is for the teacher to take the child under his care and lead him gently and carefully in this path. Difficulties rise of course. It is very easy for the teacher in the study of history, in taking a class as we do in our institution that perhaps has been taught three or four years by some other teacher, under careful training in language; it is easy for a careless teacher to spoil that child's language entirely. There is no need of it. If the child's language goes to pieces it is generally the teacher's fault.

How shall this be done? How shall we so introduce our children to the study of history that it shall be pleasant and profitable to them? The Principal brings into the school-room every year a set of new books. Every eye is delighted. A new book! It remains with the teacher to decide whether the first two or three mornings in that book shall utterly discourage the child; or whether it shall be succeeding steps, each one more delightful and pleasant than the one before it. The study of history is not dry, nor dull, nor uninteresting. It may be filled with life and pleasure. I say so because I know it. How? I will take the liberty of giving you, briefly, the way in which history has been taught in our institution. I lay no claim to originality in regard to it; because a large part of it is what I myself have learned from those who went before me. Some of it I have worked out for myself.

A new book is placed in the child's hands. The teacher, before g

ing the lesson, reads such parts of the book as he thinks will be a suitable lesson for one evening. Be careful that the lesson is short enough. Do not make it too long. Read it carefully. The teacher sees words, expressions, and phrases that he knows the children are not familiar with; what shall he do about those? Select such words and write them out on the board where the children can see them. Place by them the sign for the part of speech to which they belong, and place on the same line the synonym for that word. Having done that, for the sake of accuracy let the class copy these words on paper, or on a little book prepared beforehand, perhaps. Then assign to them, say half a page or less. Let the pupil know that that is to be mastered. What do I mean by mastered? I do not mean memorize the language, although it may be memorized; but by mastering it I mean obtaining possession of the ideas that are in there, so that the next morning when the class comes before me, and I choose to call up a single pupil, and he faces me, the class looking on, and I very carefully select a point and ask him in signs about that, he understands the signs and knows what I mean, and can respond by signs. I know whether he knows it or not. I must make allowance for the child's capacity, of course; we must work patiently and carefully; and by doing this day by day we find we are getting a grasp of the book. In a short time new words will recur and other words will come, and the child's vocabulary is being enlarged, and his knowledge of phrases is being enlarged; but most of all, he is getting a knowledge of how to get information for himself from books. I would not resort to a practice that I think is sometimes resorted to before the lesson is given—opening the book and calling the attention of the class to it, and giving them the ideas that are there. "No, the ideas are in the book; take them out for yourselves." I demand that every child get for himself the ideas that are in the lesson; and if he does not, I want to know the reason. I find no difficulty in teaching the lessons in that way. The lessons are learned uniformly and perfectly according to the ability of each special child. There is no failure about it.

In connection with this the child recites by signs, and it is a very proper and profitable exercise for the teacher to write out himself a synopsis, in simple language, not book language, but in the simple language which the pupils would naturally use themselves were they familiar with those ideas. Write it out in that way and let them read your version of it, and perhaps some time during the day have them put it into a synopsis; all the ideas that they have had in the lesson. I do not see why this should be hard. I have not found it so. I find constant delight and success in my class.

I would say that since February I have varied this somewhat. I have found that it was not necessary to question the class by signs, to see whether they understood it or not. I found that they did, that they had so mastered the book that they could give the ideas that were in it. So I said now we will make this lesson a special language, instead of a sign lesson. So every morning I wrote out, not in their presence, but so that they could not see me, a set of questions, covering from one and a half to two pages of the lesson, which was United States history. There were about forty questions. They did not see the questions with their books open. When the time came the books were closed. The questions were presented to them and they were expected to answer those questions embodying the whole of the lesson; every thought and every idea expressed in the lesson that was

meant to be drawn out there. I found that a very successful exercise. We found that in the course of fifty or sixty pages we had some one thousand six hundred questions. The class became very familiar with the lesson, quite as familiar as with signs and enlarged their vocabulary.

A MEMBER: Do you have the class submit those replies to you?

MR. CLARK: It is very necessary that every child should have his paper carefully corrected. I have here a sample, but not the best sample of that sort of work, which you can examine. They cannot answer those questions by just taking out a part of the sentence, but they must form sentences for themselves in their answers. I ask a question and the answer must be given, not yes or no, but it must be given as it should be given.

The history that the child will naturally take up first will be a history of his own country. He wants to learn about the things that have transpired in his own land. He wants to learn what the different political parties mean, because he is going to be one of those citizens and a part of this great country. He wants to be an intelligent man. And our duty to the child rests just here. We are to prepare him, to arm him at all points. And I claim that we cannot better do this than by the study of history. The study of the American history that I use naturally covers about two years; that is the fifth and sixth years of the pupil's course in the institution. The seventh year we generally take up English history. Of course a child has not become accustomed to books by the fifth year. We need to test every word and every idea. The teacher must not be in a hurry—must be slow and thorough. If the class can go through American history thoroughly in one year, there is no objection, but I have never had a class who could. I am willing to spend two years in it. They have used Lossing's Primary History, which is the best that we have yet found. Then by the seventh year he is ready for English history; and the eighth year, which is frequently the last, he has the history of the world so called, and also in connection with that a physical geography, or something which is akin to it. And we think by that time he is pretty well equipped, and we find it to be so as a matter of fact, for life's work.

One thing I will mention, that we review very carefully by subjects, by topics, and by names. I, myself, in connection with all the history I have ever taught, have written an account, for the pupils, of every character mentioned, and of every event I have located the time. I insist upon their having some idea as to whether it occurred before the flood or yesterday, and I would not teach any fact without locating it somewhere at some time.

I find one profitable exercise to be this: I call upon the pupils to take their slates and stand up, and I give them some topic that we have had a few days before, assigning to each one a different subject, and request them to write what they have learned. It is a very efficient exercise. When they have finished I let each pupil examine what the one next to him has written, and to correct the mistakes, if any occur. This makes them very careful, and any pupil who has any pride will learn to do his very best to avoid such mistakes. It helps to guard against carelessness in language, for they feel that the time has come when they must stand before their peers, and show whether or not they know what they have been trying to learn.

A MEMBER: How many pupils are you required to teach?

MR. FAY: I have had fifteen in my class during the past year.

A MEMBER: Do you allow the children to criticise and make remarks about the lessons?

PROFESSOR FAY: I allow the pupils full opportunity to ask me any questions they choose, but they must ask them of me directly. I allow no criticism among themselves. When they have a recitation on hand that is the first business. I criticise the lessons myself rather than let the pupils do it, unless I have an exceptionally bright pupil that I may appeal to; once in awhile I let him or her correct them. I think that is a better practice.

DR. LATHAM: I have used practically the same system that Professor Fay has spoken of in the past year, and, I think, with great success. In the last examination the majority of my pupils received over ninety per cent out of the possible one hundred in the examination, and with about that same system.

MR. HOTCHKISS, of Washington: I have had no experience in teaching young children, but I have had experience in teaching history. I think the text-books ought not to be used with little children; that it requires considerable development in order to understand the history of the actions of grown men and women, and little children are not equal to it. I think that stories should be selected from history to give to little children, making them also the means of improvement in language. But I do not like to call that history. You might as well call the humorous stories found in the newspapers history.

With regard to teaching history to older pupils, I agree with Dr. Latham, that a knowledge of geography ought to precede the study of history. Referring to my own experience in teaching children history, I ask them about some city, and if they do not know about it, or where it is, I show them the location in the atlas and then ask them to find it on the wall map. Often they cannot do it. Trying to find Greece, and knowing it is a peninsula, they will pick out Spain, because they have not learned from geography where Greece is. They may be able to find Greece on a small map or atlas, but not on a large wall map. I have found out that in this way a great deal of time is wasted in the teaching of history, in correcting mistaken ideas in geography. Miss Thallheimer has written an excellent history, in which she urges that a knowledge of geography should precede that of history.

In our department, in the institution at Washington, we have constant recourse to maps to find places mentioned in history. Much of that would be unnecessary if geography was better taught to the pupils before they came to the college, and we should have more time for the proper work of teaching history.

Connected with that I have sometimes required the drawing of maps connected with the lesson in history. Sometimes in examination I require the drawing of maps, but it takes a great deal of time. If there is not time to draw the whole map I have a skeleton or outline map; for instance, historical Asia, Africa, and Europe. I have that prepared beforehand, simply giving the coast lines of the country, with a few of the rivers, as the Danube and the Rhine, to serve as landmarks, so that the pupils will understand thoroughly what it is a map of, and I give them to the students in their examination, with a list of the places referred to in their history lesson, and I require the students to place each of those cities on this outline map, and, in connection with that, to write what events they know of in connection

with those places. I find that a very successful plan of testing their knowledge of geography. In that way I also show how places are related to mountains and rivers.

I admit it is very difficult to teach dates so that they will be remembered. My endeavor is to require the memorizing of leading dates; the dates of the leading facts of history which are often referred to and are necessary to know; the date of the fall of the Roman Empire, for instance; the relation of dates to one another. One event occurs ten or twenty years before another event, and it is necessary for them to know the one date, and then they associate the others with that. Referring to the revolt of Asiatic Greece against Persia. Who was the ruler of Persia at that time? Darius. It is necessary to know the connection of those events with one another, and you cannot do that except by knowing the dates. And so in modern history, I select some prominent man, and make him the central point upon which to hang other events. For instance, I take the date when Andrew Jackson died. It is very easy to connect other events occurring about that time, with that. But whatever method is employed it is necessary that the pupils should have some knowledge of dates. They must know whether Lincoln lived before or after John Adams.

MR. SPRUIT, of Iowa: I have not had much experience in teaching history, but in what experience I have had the main difficulty has been to get the child to understand the idea contained in the language—the idea of the picture behind the language; to get the child to understand the fact as the language attempted to portray it. And I have not found it advisable to confine the pupil to the language of the text-book. I have had recourse to illustrations of all kinds. Sometimes I have illustrated what I desired on the sand table. For instance, taking the settlement of Jamestown, to make on the sand table a picture of Jamestown, and the river, I would cut sprigs of evergreen to represent the forest, the Indian huts, and so forth, to give an idea of the country when our forefathers first came there. To teach them the meaning of the word “settle” I would show them, as I have said, on the sand table, a country covered with forests, and show them that the settlers came there to go to work; that in the first place they must have a place to sleep, and they cut down the trees to make log houses. Then what is necessary next? They must have something to eat, and they begin to till the soil, and they must have room for their food to grow, and they cut down the trees and clear it off. Then the population increases, and others come, and they keep on clearing, and after awhile we say the country is being settled. I represent the first on the sand table so that they know what the idea is contained in that word. And a pupil who has in mind an idea of what “settle” means, by that picture, will have a better idea than if he is simply given that word. So with each topic, for instance, before the year 1800 in our history we have to do with colonization, with war, then with peace, prosperity, commerce, etc. I attempt to give each subject clearly, either by action, or by picture, or by having it upon the sand table, and, if necessary, we have it acted out. In our school we have bad illustrations of war, giving an idea of the opposing armies so that they clearly understood it. Then we would show the meaning of victory and defeat.

MR. WILLIAMS: In the study of history I think the teachers should keep in mind, all of the time, that there are two distinct things: first.

the ability of the child to take ideas out of book language, and when the child undertakes to reproduce these ideas, that he should not be allowed to use the book language, but that he should be obliged to put those ideas into the same style of language that he would use to express his ideas in regard to anything that is taking place. He should be compelled to express it in his own language.

MR. GOODALL: That is exactly what I do by my process.

Here the normal session adjourned until seven o'clock this evening.

AFTERNOON SESSION.

Professor Gillett in the chair called the convention to order. Rev. Dr. McClure, of Nebraska, offered the opening prayer. The Secretary read the minutes of the last meeting, which were approved.

THE CHAIRMAN: I have just received a letter which came in the mail to-day from the oldest living teacher of deaf-mutes, and the oldest Superintendent in America, Mr. W. D. Kerr, of Missouri. He is now approaching eighty years of age, and is still in active service. The letter is as follows:

MISSOURI INSTITUTION FOR THE EDUCATION OF THE DEAF AND DUMB, }
FULTON, Mo., July 13, 1886. }

To the President of the Convention of the Teachers of the Deaf and Dumb, Berkeley, California:

DEAR SIR: Permit one of the oldest teachers of the deaf and dumb to send through you his greeting to the fraternity in convention assembled at Berkeley, and to express his unfeigned regret that circumstances beyond his control have prevented his attendance. For about fifty-five years I have been an instructor of the deaf and dumb. During more than half a century of experience and observation I have witnessed many changes, and watched closely the varying fortunes of our institutions; and now, in the evening of life, I feel grateful that so much has been accomplished for the unfortunate class among whom much of my life has been spent and with whom are my warmest sympathies. Much remains to be done. The world moves, and I rejoice that our profession has not fallen into the rut of anti-progress, and am willing with patient effort to try all and hold fast that which is good. On one of the questions that will come before the convention permit me to express my opinion. While quite a number of semi-mutes may make practical use of articulation, the beautiful and expressive sign language will continue to be the medium of instruction and communication for the great mass of the deaf and dumb. And yet, with all my half century of experience, I am not too old to learn nor too prejudiced to admit that there may be found methods far superior to any I have known and used, and none would rejoice more than I to see it demonstrated that my opinion is too hasty to be correct.

If what my friends tell me is true, my enforced absence confers upon my excellent friend, Dr. Gillett, the rank of veteran Superintendent of the convention. I abdicate cheerfully in his favor.

Trusting that the interchange of views at this convention may result in great good to the unfortunates among whom we labor,
I remain, respectfully,

W. D. KERR.

THE CHAIRMAN: The first paper to be read this evening is, "How to Conduct a Scientific Examination," by Theodore Grady, of California.

HOW TO CONDUCT A SCIENTIFIC EXAMINATION.

We assume that a fair mode of ascertaining the results of academic work at stated times is indispensable to the well-being and progress of any school, and that nothing exerts so powerful an influence, by way of stimulation to active and faithful application, upon the teacher and the pupil alike, as a fair and intelligent examination. We assume that the more critical and discriminating the investigation

grows, and the more strictly we hold the pedagogue and the student to account, the greater efficiency of the work becomes apparent. Experience justifies the conclusion that our assumptions are not unfounded. Grant all this, and it follows that it is a question not only of utility, but of moral obligation. No one denies the fact that an officer in charge of any educational undertaking is morally bound to render a satisfactory and authentic report of *faithful work* in every department. That accounting must be honest and accurate. He must conscientiously avow that his charge is in no way suffering from incompetency and negligence of duty, and that his wards are enjoying their just share of official attention. Where incompetency and waste rule, means must be devised to get rid of them; it must ever be regarded in *practice* a crime to acquiesce in them, or to sanction them.

The term "scientific," used here to qualify the meaning of our subject, presupposes a certain attitude of mind in the examiner. We cannot lay too much emphasis upon the manner in which an investigator mentally approaches the object of his search. We have no reason to expect delicacy and dexterity of manipulation from an awkward and negligent experimentalist. All that has been said about the necessity of the "scientific spirit" as a prerequisite to a successful career in scientific discovery applies with equal force to a true and impartial survey of the results in the class-room. It will do us no harm if we wander from our point and hunt the full meaning of the expression "scientific spirit." It may be defined to be a characteristic consisting of an intense love of truth for its own intrinsic worth in preference to all things, accompanied by a desire to arrive at certainty and accuracy, and by an abhorrence of everything that tends to interfere with the judicial nature of the mind—self-interest, and bias in every form. Therefore an examination, in order to be scientific, must be conducted in a scientific spirit, and must be certain and accurate in every part. It must be critical and thorough. It must be discriminating, even to a nicety, in its nature. In other words, it must be able to determine the rank of each pupil even to a decimal. Of course due allowance must be made for every disturbing element, but only a valid excuse is accepted. It must be adapted to every stage of mental growth, and its motto will certainly be, *fair, but thorough*.

Let us proceed to the discussion of an ordinary examination in detail. The first question that confronts us is: Who should conduct it? Everything depends upon the examiner. He must be competent and upright, and free from all pettiness of mind. He must emphatically be liberally imbued with the scientific spirit. He may be the Principal, or one of the teachers, or an outsider. If he were the Principal, he should endeavor to make it a regular institution of the school, and to allow nothing to interfere with the work at any price. Were he a teacher, common decency would require that he have nothing to do with his class in the preparation of the questions and appraising the credits. Should he be an outsider, he ought to prepare himself for the work beforehand, especially as the nature of our education requires special study. Many of our institutions are situated in the neighborhood of an excellent college or university. It would be a good idea to get one of the professors or instructors interested in the cause, and to engage him as our censor. Let us anticipate your objection upon the score of finance. Why, every bo

ness house of any importance annually sets aside a certain fund for the purpose of employing an expert to verify the books. The money is never regarded as wasted. Why should we not do likewise? We spend thousands a year in the routine part of the work, but we object to employing a pedagoging expert. We flatter ourselves that we discharge our duty in running our machinery in a perfunctory manner, but we seldom, if ever, insist on a scientific summing of the results to see whether the concern has been a losing affair. We never run any business by sufferance or by special leave and favor; why should we do it in our educational work? Why do we invite an outsider or outsiders to investigate the condition of our schools, and ask them to tender a complete and scientific accounting of our educational fruits by special leave and favor? Do you suppose that their report can be otherwise than cursory? How ridiculous we seem in our request, when we consider that it requires from six to ten days to examine a school of one hundred and fifty to two hundred children, and a month to prepare the questions, to inspect the classes, to examine them, and to find the percentage of each child, and to make a final report.

When the number of children to be examined is very great, say three hundred to six hundred, it requires more than one man to do the thing. A committee or board of three examiners, each one of them bearing a high reputation for integrity, is suggested. They may divide the work among themselves, or may work jointly. Were they teachers engaged in the place, they should neither hold dealings with their own classes, nor with those of their fellow examiners. Let the three classes be examined by the Principal in the same manner, and with the same scrupulous care.

Now we beg leave to notice the nature of the questions and the marking system. The questions should be fair and thorough, and discriminating enough to discover the real merits of each pupil, and to place the children in their true ranks. The number of questions to be propounded must be regulated by the grade of each class. It may be generally stated that where the faculty of judgment is least developed, the number should be large, and where the power is most completely developed; comparatively speaking, the number should be very much limited. For, it is unfair to expect kindergarten folks to judge for themselves what is important to commit to memory and what is not. Therefore we ought to see that they lose fewer credits when they fail to answer a question than the children of advanced classes do.

The marking system should be certain and accurate. There must be no guesswork even in appraising the credits; but, on the contrary, everything must be calculated in a purely mathematical manner. It would be a much wiser act if we should adopt a severe test like that in use at West Point, and require a low passing mark (as in vogue at Harvard University, where the passing mark is 40 per cent), than if we should maintain a higher standard, and a loose marking system. The questions should be uniform in their nature through all classes, and the marking system should be made to work no injustice to anybody. We should never endeavor to entertain anything like a sham, for our little ones will surely mock us to scorn.

On the whole, the examination should be managed on pure business principles, and nothing should be taken for granted. Like *Cæsar's wife*, the teachers should be above suspicion; and for their

own protection should avoid suspicious appearances, especially as they are surrounded by a class of keen observers, whose powers of drawing personal inferences seem to be abnormally developed. The unfortunate teachers would be the only ones to suffer. Heaven help the man whose reputation is forever under a cloud, and who can never have an opportunity of proving his absolute innocence! Therefore no maudlin sentiments ought to stand in the way of a business-like examination. We never feel slighted when a receipt is demanded of us.

We have expounded the nature of an examination as is in common use in the public schools, with the exceptions suggested as specially suited to our peculiar work. But we shall now proceed to discuss the merits or demerits of that system. However, we may repeat that in order to conduct an examination fairly and justly, we must have an idea of what the object of education is. What is it? Is it the development of any single faculty or an aggregate of faculties. Bear in mind that we have only to deal with education as far as it concerns the intellect. If it aims at the cultivation of any *one force* of mind, what is it? Is it the power to judge and comprehend—the intelligence as in contradistinction with any other single faculty, as for instance, memory? Now let us look at the public school system and account, if we can, for the general tendency toward superficiality. Do not we find the burden of proof lie in the mode of conducting the examinations? What do we see? A vast process of memorization. We engage to find how much our children *remember*, and congratulate ourselves upon the result. But we hold no official recognition of that important factor of mind, which we call *intelligence*. Our children enjoy a smattering of the languages (including their own English), and the sciences; but they lack the scientific spirit—they don't observe, they don't think, they don't reason, in the proper sense of each word. Were they so situated as to possess a vernacular different from the one in vogue at school, and as crude as our sign language, the evil effects would be much more palpable. If that is the condition of our public schools in general, with their elaborate system of balances and checks, what must be said of an ordinary institution with its extremely elastic condition, where everything seems to be run in a *dilettante* sort of way? Is not memory practically regarded as the end of education? Do we not sometimes go a little too far and treat education and memory as synonyms? Do we not sometimes believe our duty discharged when we preside at the mechanical reproduction of a lesson? Do we not long fondly for the day when we should crown our work by making our pupil a living phonograph of our words?

How are we to discourage or to avert those tendencies, while not underestimating memory as a disciplinary power? Let us recognize the much abused faculty, intelligence, when we ascertain the results of class work. How to do it? Here is a suggestion. Suppose we hold an oral examination, as it were, immediately after the written one, in order to see that the pupil understands each question and its corresponding answer. Further, let us prepare a list of test questions from the text-book, or from the teacher's memorandum, in order to determine his intelligence. In this respect, since it concerns the intelligence solely, the queries should be somewhat more difficult than those used in the written exercise, especially as it consists of reading at sight. Each answer is to be graded according as it gives a clear, vague, or obscure conception of the meaning of each passage, as the

case may be. The credits acquired at the two examinations should be kept and entered separately. An average of the two would give a fair estimate of educational progress made by the scholar. We may go a step further and allow him credit for the faculty of expression according as the answers are couched in good, indifferent, or bad English, as the case may be. The class average in each of the three instances will betray each teacher's standing for the past term, and the Trustee of our educational estate will possess an authoritative record of the condition of the estate.

However, in order to do full justice to the work on hand, one should make a personal inspection of the classes previous to the examination. The object of this inspection is to acquire an insight into the method and plan of instruction as pursued by each teacher; and this thing should not be accomplished in one day. The purpose of a perfect and complete examination would be defeated if we had neglected to take into account the aim, theory, and the practical work of the past term. So let us supplement the examination of the children by that of the teachers. However, this supplementary inquiry does not partake of the nature of a competitive examination, but is simply an inquiry into the character of the work done in the past, and necessarily the aims and theories which governed that task. This object may be attained by issuing a circular to each teacher some time in advance of the school examinations, in which paper as many questions may be propounded pertaining to the nature of the professional labor as may be proper in the opinion of the conductor. The pedagogue is supposed to answer them in a proper spirit. The questions and answers need only be very brief.

To illustrate: We may ask, among many other things, what amount of time is spent on each subject of study—time to be calculated by hour per week; what study is regarded as the most important; what end or object he has in view, and so on. Each question is intended to serve a purpose. Thus, in our inquiry concerning time, we would know whether each subject required so much. To be more practical, we propose to judge a teacher's success, not by the general average of the class in all studies, but chiefly by the average of the section in the most important study—important according to the teacher's opinion and the amount of time given it. Therefore, if he make a failure of the class in the central work, his labor is supposed to be lost, even if his pupils as a body gain a high percentage in the rest of the studies, especially when that subject commands an unusual amount of attention and time. This is based upon the principle of cause and effect.

Further, if the class attain a high standing in the least important study—in the sense of the least amount of pedagogical attention—the head of the section is not to be credited with it, as it may not be an effect of his work, unless he is successful in the most important phase of the task. In other words, the grand total average of the class may reflect upon the teacher where there is no failure, in the collective sense, in the most important study; but not when there is. A failure in this single instance is a total failure on the whole. The number of important studies is not restricted; it may be one or more, according to the nature of work required of each class. There should be no such a thing as guesswork or luck with the teachers.

It may be disputed that we apparently allow the teacher very little freedom. No; it is a mistake. They are as free as ever—just as much

as we are free moral agents—but we endeavor to hold them strictly responsible for their acts, just as we are morally for ours.

The best advantage of such an inquiry lies in this: It gives a man of tact the most agreeable and the most efficacious means of introducing reform into a class-room, and of remedying abuses, in a quiet and unassuming tone. For example, if we prize highly the science of teaching mutes how to read, we need not invade the pedagogical “sanctum sanctorum” and order the introduction in a dictatorial manner, but write down these questions on your circular and ask: What is being done to encourage outside reading? What is being done to teach our pupils *how* to read, and *what* to read? What is being done to enable them to obtain a wish to read, or, finally, to acquire, through reading, the art of thinking? So we may introduce any other questions to illustrate the progressive ideas of the day.

Another benefit may come from this plan. The Principal would command a clear knowledge of the workings of each class-room individually, and of the school collectively, and he would render himself useful in the highest degree. The effectiveness of the school system would reach its greatest density.

Let us anticipate a few objections: Time should be no objection; we ought to make time for the purpose, and we can always. An examination is always as indispensable to our cause as the routine part of the work. Much has been said about the “diabolic horrors of cramming,” but, in general, they arise from a false conception of the mission of an examination on the part of the scholars, and frequently on that of the teachers. If the examiner should only show a clement and liberal spirit in his demeanor and mind, and if the teachers should discourage all excitement, the examinations would never be regarded in such a light.

Finally, let us suggest that the results of the examination be recognized as a part of the official records of each school by the Board of Directors, and no pains should be spared to render the examination thoroughly scientific. A separate fund, if necessary, should be created for that purpose.

Miss Annie M. Black here took the chair.

MISS BLACK: The next paper is, “Thoughts from my School-room,” by Laura C. Sheridan, of the Illinois institute.

THOUGHTS FROM MY SCHOOL-ROOM.

If the title of this paper seems lacking in dignity, considering the character of this assembly, it may be pardoned by recalling the criticisms sometimes advanced in regard to our conventions, that the real difficulties of the school-room have not been presented so fully as questions having a general bearing upon the profession. Indeed, is it saying too much to say that aspiring teachers have felt a disappointment after attending a convention at hearing so little plain talk upon the practical questions that have knotted and snarled their school-room work? Our institutions are so widely separated, each one is so altogether a world in itself, the opportunities to meet and compare notes are so very rare and brief, that a writer feels diffidence in presenting difficulties, lest overmuch ignorance be displayed before those who have long since solved the questions that puzzle. But this fear should not deter candid expression, as only open, free,

frank, kind discussion can reveal the light that has come to some, to the good of all.

So we come before this convention seeking, questioning. We know not the experience of others, but for years we have had a growing feeling of dissatisfaction with the results obtained in teaching language. The sarcastic mood of the "Disgusted Pedagogue," as displayed in the "Annals" some years ago, struck a deeply sympathetic chord in our breast, but we are not so ready now to accept as inevitable that which discourages or disgusts. Indeed, we are full of hope that a radical change in our method of teaching in the intermediate and advanced grades will finally bring us to our goal—a class of graduates in possession of correct English.

When we view the style of composition prevailing in the deaf-mute world to-day, we cannot believe, notwithstanding all the discussion and experimenting of half a century, that the "natural method" of teaching language has been so discovered as to be applied continuously throughout the course, and this conviction is strengthened by the fact that the pupils make so much greater progress in language the first half of their course than the latter half, when the reverse should be true. We think the cause of this may have been failure to apprehend clearly in just what way the deaf child *must* learn language as a hearing child does, and in just what way he *cannot possibly do so*. He has been given practice when he should have had principles, and principles when he should have had practice. The hearing child learns language without knowing how he learns it; he picks it up, here a little and there a little, each occasion for its use adding a mite to his store. The deaf child must learn language as the hearing child, as to direct association with the ideas or circumstances that require the expressions used; but, instead of learning it unconsciously, he must give attention, effort, application, and besides, must suffer from every mistake of the teacher, which two facts sharply rupture the correspondence between the way hearing and deaf children learn language.

God runs this universe so methodically, so noiselessly, so unvaryingly the same, that the laws do not appear upon the surface, are never matters of thought except to the student, yet the slightest variation from its beaten track of a single law would plunge everything into ruin. Although the hearing child learns language so easily, so unconsciously, it comes to him under as rigid a reign of law as come the comets of our starry heavens in their periodical visits: so must the deaf child learn language under law. The teacher stands behind him as the creator. She must fathom all the laws and mysteries of construction, that she may know how to teach language aright, may know how to lead the pupil in a *right way* of doing without confusing him with a consideration of the law of his doing. That we have failed in so large a degree is no wonder, since the book of nature is the book of God, and not easily read. The time has not been lost if we are thoroughly impressed with the fact that what God has easily imparted to the hearing we can never hope to easily impart to the deaf, and of the fact that we will never learn to teach language properly until the why and the wherefore of every exercise has been mapped out carefully in our minds as a simple step following closely upon what has preceded it, and linked just as closely with a step beyond. The bane of our profession has been hap-hazard medley teaching. We all have used simplicity, method, and more or less of

common sense in starting our pupils, simply because we would never get them started if we did not: but the practice too common after that has been tersely expressed by another in these words: "We first hang away awhile at a single form of expression exclusively; then hang away at a medley of forms—present, past, future, perfect, active, passive—all being jumbled together and piled on top of the previous drill. We dump first one form and then another upon the pupil, in a promiscuous heap, instead of taking the greatest pains from the very start to keep them separate, and carefully placed, each upon its own special shelf, in the pupil's mind."

We propose to treat in this paper of four common errors in the practice of teacher and pupil which greatly hinder the latter's progress in language:

1. The use of words by the pupil that have no meaning to him.
2. Drill on words, tenses, or forms of expression apart from direct association with such facts and ideas as lead hearing people to use them.
3. The use and misuse of the text-book.
4. Our practice of assisting pupils in composition, and using phrases and terms of expression in correcting his exercises which he cannot comprehend.

To illustrate the first point take the articles "a" and "the." "Our pupils use them a long time without a glimmer of sense attached to them. After awhile we find that it is almost impossible to make them bear in mind that they have any signification whatever." The writer has never met a deaf-mute who will not make mistakes in using the innocent looking but terribly complex little article. One who can with care write English that would be creditable to many well educated hearing persons, and who can converse readily and intelligently upon topics of a profound nature, will in the careless freedom of letter writing make astonishing mistakes with the article. Show us the teacher whose pupils never make mistakes in the use of the article and we see the perfect teacher of deaf-mutes, because the close thinking, the ready perception of cause and effect in construction necessary to perceive and make plain the many distinctions between the proper and improper use of "a" and "the," will lead the teacher to go to the bottom of the difficulties of construction and attempt to teach no word without doing it in such a manner as to reveal to the pupil its relation to other words in the sentence. Inexperienced teachers have no idea how difficult it is to teach the article correctly. The writer once stepped into the school-room of a cultured lady, one who had had wide experience in responsible positions in hearing schools, but very little experience with deaf-mutes. When asked why she was permitting her pupils to write "*the wagon*" where the connection required "*a wagon*," she looked surprised and said she had supposed the former way proper enough, since it was grammatically correct. "*A*" means one, but not any particular one, *in distinction* from "*the*," which always means some particular one; but the average deaf-mute supposes "*a*" to mean one in distinction from two, or some other numeral, which meaning it never has.

After the first few months of school life, the teacher should never correct a sentence containing the article without asking why one is used instead of the other, and clearly explaining why when the pupil cannot do so. The pupils will take it up, and soon ask why themselves when they do not understand the why in sentences that they

see. So the pupil learns that we say, "I saw *a* train go by," because we may mean any one of the trains that go by every day, but that we say, "I started *for the* train," because we had made previous arrangements to take that particular train; also, that we say, "I bought *a* dollar's worth of sugar, and handed a two-dollar bill to *the* grocer," because we necessarily hand the money to the person from whom we obtain the sugar, but "*A* grocer sold a dollar's worth of sugar," because no particular grocer is designated; also that "*a*" may be used throughout in an example to speak of the worth of a pound of raisins because no particular pound in the entire stock in the grocery is designated, but that a boy buys *a* pound of raisins, and his mother weighs *the* pound, because she weighs the particular pound he brought home; also, that we say, "*The* key to *the* front door is lost," because that particular door has its own particular key, while we say, "You use *a* key to lock *the* door," because, while reference is made to the particular door of the room in which the remark is made, and which may have its own particular key, reference is not now made to the key, but to the kind of article among many articles that is needed to lock the door.

"A man had *a* new floor make to his barn," but "Mary spilled ink on *the* floor;" "A man bought *a* clock," but "I looked at *the* clock;" "A boy was carrying *a* pitcher but broke *the* handle," and many other examples might be given, but these will suffice to illustrate the great care that must be taken in teaching the article, lest we allow our pupils to write what sounds correct to the ear in simple composition while seriously wrong in principle.

To avoid the second error alluded to, we should always ask ourselves the question, "What are the circumstances under which a hearing child would express himself so?" and then teach the new tense or expression *only* in connection with real or imaginary *facts*. Why is it that bright pupils of six years' standing will be guilty of such a deaf-muteism as this, "One night Mrs. H. walked around the room and her husband heard her and thought she was a burglar," when they understand perfectly the meaning of the progressive form of the past tense, and supply it immediately at the suggestion of the teacher? It is because when the form was first taught them they were allowed to write it in meaningless, detached sentences, such as, "A man was plowing in a field," "A girl was walking in the garden," or else having been taught it correctly, as always closely connected with something that immediately preceded it or followed it, they have not been habituated to its use by being required to *always* use it where its use was possible. It is not enough that a sentence is grammatically correct. We must go beyond correct sentence writing in our ambition for our pupils or they will ever remain bound in deaf-muteism. "Can I possibly lead the pupil to express this idea as a hearing child would?" should ever be the earnest question, and a question asked again and again, and kept under the focus of the powers of the mind, until the secrets of the laws of construction see plainly and make plain to our pupils. We fail in teaching language because we do not teach *how* to do it. For every form of expression there was a way by which it reached us and we must find out that way.

If we cannot think of any reason to give a pupil why an expression is written so, nevertheless there remains a reason, and in searching it out we may discover a principle under which a large number of similar expressions may be classified and made plain to him. Of course no one will suppose us to be speaking of the study of grammar. The illiterate person can do little to correct confirmed habits of speech by the study of grammar; neither can the deaf-mute learn language by studying the rules of grammar. He must learn language by using it, and by using it in direct association with what requires it, as we did. "Ah!" says the advocate of the so called natural method, "that is just what we claim. These friends who are all the time talking about method and philosophy would load the pupil down with rules and put him in such a straight-jacket as is nowhere else witnessed in nature in acquiring language." So in our practical every day work the natural method man whispers in our ear, "Learning language is mostly a 'pick up' process. If a pupil is anxious to express an idea, but does not know how, put it in language for him; for his mind is in that receptive condition to make him seize upon it and remember it." The philosophical method man whispers, "Be careful! By all means give him a new word or two if you can fit them into constructions with which he is already familiar; but as sure as you write out a form or idiom that is new to him, you lead the way to greater confusion in his use of language in the future. Drop everything and teach the new construction thoroughly, or withhold it until you can do so." There is no quarrel here, but there is such a thing as the natural method running mad, and so crowding the pupil's memory with a mass of forms that half the time he does not know which one he needs to use of the medley in his mind.

To teach a new form of expression, the teacher needs to have thought out his subject thoroughly, so as to be able to give reasons and explanations for difficulties that may arise. Then it should be taught in sharp contrast with those already familiar, ringing changes being made upon it in composition to see if the pupil understands the teacher's explanations and the manner in which this new expression differs from others. Step by step; practice, practice, practice; is not this the way to learn language? Encourage the pupil to "pick up" all he can by reading and conversation; but he has a whole lifetime for that, and only a few years of precious school life for drill in principles. When he "picks up" in the school-room by wrong practice, he falls a victim to the principle embodied in the old adage, "Teach a horse to trot, and he will never learn to pace."

But, says one, to take time to so teach all new forms of construction arising in lessons would leave no time for anything else. That is so; which is why we think a radical change is called for as to the character of the lessons we assign our pupils; such a change as will dispense with the text-book, and make the language of lessons so simple that everything new can be brought out and developed in the recitation, as is the case with hearing children. Having had opportunity to observe the vastly superior results obtained in starting with the past tense in connection with action writing, journals, writing, descriptions of pictures, etc., without the use of a text-book for three or four years, over the results obtained in starting them with the present tense and constant use of the text-book, we cannot conclude that the same principle, carried out in the entire course,

is the only way to attain unto our goal—a correct use of English on the part of our pupils.

If there is a constant outcry against the text-book for the hearing child because he stumbles over the hard words, what shall we say about the text-book for the deaf child, when the construction, in addition to words, has to be laboriously explained by the teacher, only to run out of his mind like water from a sieve, so far as practical benefit in language is concerned. What folly to suppose that there can be benefit in memorizing lessons that cannot be comprehended by the unaided effort of the pupil *as to the construction*; and until our pupils can write correct English in simple style where is the text-book that can be so comprehended, unless prepared especially for them. If our condemnation of the text-book seems immoderate, let a burning sense of the wrong it does our pupils, in consuming so much of their precious time and making so little return for it, atone somewhat for what may seem ultraism. Again and again graduates of a few years' standing have assured us that they would have preferred omitting several branches that they had studied if the time spent on them could have been spent in practical composition. Is the lack in language the crying need of the deaf-mute world to-day, or is it not? We put our ear down where we can hear the fever-heat pulse of desire and the burning heart-throbs of sorrow over business failures and social mortifications, and we hear nothing but "Yes, yes, yes." We think our old pupils, who have gone out into the world, would really hate us if they thought we had not done all we could to give them a command of language.

Our plan is, now, some language first, then devotion to certain branches of study considered indispensable to the dignity of any school. Should it not rather be, to give our pupils a knowledge of English that will lead to its correct use and such knowledge of other important branches as can be conferred in the process of teaching English. If we could so reverse matters at least deaf-mutes and their friends would invoke blessings upon our heads.

When the pupil is pinned down to hard facts in practical life what compensation is a smattering of a few scientific studies instead of power to use that language which is indispensable to his best success and to his happiness in social life, not to speak of the unlimited source of enjoyment he would have within himself could he read books and papers with ease.

Our faith is that the intellectual life of our pupils need not be in the least cramped by such devotion to English. Is it not the language into which all intellects have poured their wealth, and can it be acquired by the deaf-mute without as actively engaging his intellectual powers as any study could? We think not. We rather think that it can be so taught as to bring into vigorous and harmonious exercise all the faculties as present methods cannot.

There is a great field of endeavor, perhaps as yet almost untried, in connection with the lecture and dictation methods. We learn that in a certain institution philosophy and chemistry are studied without a text-book, recitation and examination consisting of the performance of experiments in the laboratory and the putting in writing, on the part of the pupil, of information which had been imparted by the teacher in lectures. If any object that such a method places the pupil in contact with no language superior to his own we are met *with the fact that* in that institution the advanced pupils have such

command of language that they can do what we never heard of them doing in any other institution—write respectable compositions on current topics of the day before visitors, on topics assigned by the visitors, without five minutes warning as to what they would be required to write about. The only failure witnessed by our informant during a period of two years was when a pupil was given a topic on the money question.

Do not medical students study mostly by reading, attending lectures, and making copious notes of the information imparted, and is not this becoming a favorite method with the best educators.

Superintendent Jenkins, of the New Jersey school, has an admirable paper in the April "Annals" "About Teaching Geography," which illustrates how the kernel may be extracted from the text-book by the teacher, and the knowledge which is of most importance to the pupil grasped by him as it could not be when buried in the, to him, conglomerate mass of the text-book. The writer has tried the description of imaginary trips to countries, the pupils getting their information from the book and from the teacher, and although taking a prodigious amount of time in the correction, the pupils were eager for them. They pronounced them much harder than the memory lesson, proving to be without foundation the objection advanced, that to dispense with the text-book makes it too easy for the pupil. There is no doubt that it makes it much harder for the teacher.

Again, a memory lesson, the language of which requires half an hour's explanation in signs, could not fail to be much more profitable as the foundation for a dictation exercise in natural signs. No other exercise exacts from the pupil such alert and intense mental activity, while it reveals to the teacher his own shortcomings in failing to make signs clearly, and, as nothing else could, that some of the language of the lesson is away beyond the pupil, since he fails utterly in his effort to translate it from signs into English. After such an exercise has been corrected, the pupil will inspect the teacher's lesson with the greatest eagerness to compare its language with his own. Of course such methods as these are so tedious and slow as to the ground they cover, that none will have the courage to use them of whom anything is expected of the text-book at examination time, but the tortoise pace is the pace at which all must learn language.

Last but not least is the evil arising from assisting pupils with their exercises. In correcting them we are constantly using forms of expressions that are uncomprehended by the pupil, and how often is an entire sentence written out simply because he has not the least idea how to do it. This common practice, however necessary apparently, can be vicious and vicious only. As soon as it begins, confusion enters the pupil's mind; this imperfect instruction becomes mixed with that which was perfectly imparted, and soon he knows nothing thoroughly. In addition, finding that he is not expected to write correctly, he makes no great effort to do so, and fails to be duly impressed with the extent of his own ignorance and of the mortification and inconvenience it will cause him when his school days are over and he has no teacher at his elbow to help him out. Although it may detract somewhat of interest and enthusiasm from language exercises, it seems to us that no assistance should be given the pupil which involves anything new in construction. Any number of new words may be given if certain that they are the right ones for the right place, but any assistance beyond this usually sends the pupil to

his seat with but a faint glimmer of what our hasty explanation meant. When the pupil learns that he must, unaided, put into some kind of shape every idea he wishes to express, the very inconvenience he suffers in being refused aid will be a spur to greater effort to improve opportunities for instruction, while the teacher will have a constant and eminently practical source from which to draw topics for language exercises that take the form of drill in principles; also, the pupil will develop a versatility of expression with the language already at his command that will be of untold value to him in after life. Letter-writing day will be a trying day, but the day of all others when every pupil will realize where he stands, and if we have to spend time writing a part of our pupils' letters why not do it under our own name? We would not be surprised if such a rigid rule, faithfully carried out, would, in a few years, raise the standard of our pupils' composition beyond all expectation, because the criterion of the ambitious pupil would soon become to write so that nothing would be scratched out by the teacher as impossible of correction, without breaking the rule.

But perhaps the best result of all would be that such a rule would compel the teacher to teach step by step, to teach carefully, methodically, thoroughly. Such a rule would concentrate the attention of both teacher and pupil upon construction rather than upon words, and lead to more rapid discovery of construction's laws. Is not the conviction arising that in the past we have been whacking around among the branches of difficulty instead of striking at the roots, have been teaching a hundred words where we have taught one law, although the thorough teaching of one law would cause a thousand words to fall into line and do their duty; and have not words been taught very superficially by failing to see that a verb could not be thoroughly taught, thoroughly at a pupil's disposal, until all its derivatives had been taught also, and taught in contrast as to their various meanings, because in signs there is no way of bringing out the difference of meaning clearly? We refer to such classes of words as "obey," "obedient," "obedience," "obediently," which are signed practically alike in conversation, but how diverse their written use!

As to this important matter of teaching construction and the derivatives of words, we seem to see a morning star arising out of the gloom since we have examined and put to some little school-room test Mr. George Wing's simple but comprehensive system of symbols, treated of in the "Annals" for July, 1885. We enthusiastically believe that they embody a principle which, if they are rightly taught, could in a few months be made to convey to our language-bewildered pupils clearer ideas of the relation of different parts of a sentence to each other as many years of the study of grammar.

Some may think we have exaggerated the importance of giving our pupils a good command of language, but we feel confident that when we touch this subject we touch the great hidden sore of the deaf-mute world. Instructors in general have no idea of the feeling that exists on this subject. They think that when pupils are negligent they do not care, but our experience is that the older pupils grow the more intense becomes their interest in those exercises, so conducted that the pupils cannot fail to see that they explain away difficulties in language. And we have seen tears well up in beautiful eyes as the inability to use proper language has been spoken of as the greatest *cross of life*, while we have heard the assertion, "I envy you your

command of language," nineteen times where we have heard once, "I envy you your power of hearing." People pity the deaf because they cannot hear, but they bemoan themselves because they cannot use correct language; cannot read with ease and pleasure. Nothing is really known except what has been experienced, and those who have been face to face with the heart burnings of the average deaf-mute graduate know that there is hidden pain here that has not been dreamed of.

MISS BLACK: The next paper to be read is upon "The Duties of Supervisors," by R. M. ZIEGLER, of Philadelphia.

THE SUPERVISOR OF DEAF BOYS.

The successful management of a large institution for the deaf, like any other undertaking of magnitude and importance, requires the application of the principle of the division of labor. There is, or should be, at the head of each institution an officer whose authority, beyond such limitations as the laws of the State, or the corporation he serves place him under, should be recognized as supreme over all connected with the school. This officer requires the assistance of numerous subordinates, and he usually delegates to each of them the management of some particular department of the school, and holds him responsible for its management. He has the right to select such persons as are most capable of discharging the duties of the offices to be filled. For a steward, he requires a shrewd business man; for a matron, he wants a woman who possesses the firm and sympathetic nature required in one who is to act the part of a mother to a family of three or four hundred children; for teachers, he chooses men and women of education and of experience in imparting to others what they themselves know. Too often, however, he appears to think that the office of supervisor is of no great importance, and that its duties can be discharged by any one who can waive a handkerchief, or beat a drum to call the children to dinner, chapel, and study, and can lock and unlock a door. I do not mean to say that there are not men and women of intelligence and education who are fully capable of discharging their duties, filling the position of supervisor in many institutions, but if common report as to the salaries paid them, and the personal consideration in which they are held, is true, it shows that their occupation is regarded as menial. When one considers that, from the time when they rise in the morning till they retire in the evening, the children are for two thirds of the time under the control of the supervisor, and thinks of his great influence for good or evil over them, it is hard to understand how this state of affairs came about.

An experience of several years as supervisor of deaf boys shows that their successful management demands executive ability of no mean order; the daily exercise of greater tact and skill in settling differences than was ever called into use by a political fence-mender on the eve of an election, great quickness of decision, the avoidance of all appearance of partiality, and great firmness in the enforcement of all rules, whether made by himself or the Principal. He must also be a man of education and refinement; of education, because it is not always possible for a pupil to find a teacher when he wants aid in his studies, and the supervisor should be able to give such needed assistance; of refinement, because children unconsciously adopt the conver-

sation and manners of that adult person with whom they come most frequently and closely into contact, and a vulgar or immoral person would obviously be out of place among them.

He should be good natured, slow to anger, and able to make allowance for the youth and thoughtlessness of those under his care, yet conscious of the dignity of his position and capable of upholding it. Anger on slight provocation, worry, or impatience, will render him ridiculous, and to permit too much familiarity on the part of the pupils will lower their estimate of his importance, and diminish their respect for his authority in a corresponding ratio.

He must be kind hearted and obliging, able to sympathize with the younger children in their boyish troubles, and ready to plan for the comfort and entertainment of all.

In short, to be a *perfect* supervisor, he must possess all the virtues of all the saints in the calendar. And, in addition, he should be perfectly conversant with the language of signs. At a former convention, Mr. Brock, of Illinois, argued that the office of supervisor should be utilized as a course of preparation for teachers, through which they could become acquainted with the sign-language and the peculiarities of the deaf. This distinguished teacher evidently shares with many others a low estimate of the importance of a supervisor's position. I am inclined to think that a deaf person who has been educated in an institution, and who has afterwards pursued an advanced course of study, is the best possible person for the place; but, if a hearing supervisor is desired, he should be selected from among the corps of teachers, and should be one who perfectly understands the language of the deaf, and has associated much with them. It is not at all conducive to good order to have the pupils plotting mischief before the supervisor's face, not to speak of the inconvenience that would result from the difficulty of carrying on communication with them, and it takes many years to acquire sufficient knowledge of the peculiarities of the deaf to manage them successfully.

It may be argued that it would be impossible to find a successful teacher who would willingly perform such arduous work for so small a salary; but why not increase the salary? Is not it just as important that the pupils should be well trained in morals and manners as that they should be well educated mentally, and why should not the person who performs the former work be as well paid as the one who does the latter?

It should be the duty of the supervisor to make all *minor* rules for the government of the pupils while out of school, and to see that these rules, and those made by the Principal and Board of Directors, are obeyed. If any great innovation is contemplated, he should, of course, consult the Principal, but it adds not a little to the dignity of his position, and to the respect that will be paid his authority, for the pupils to know that the supervisor is, in reality, their guardian, and not merely a monitor whose duty it is to report to the Principal their misbehavior. No supervisor can be successful who does not possess this power. The pupils will respect neither him nor his authority. They will call him, and really consider him, a "spy" and "tale-bearer." This is, of course, very foolish, but children, and especially deaf children, *will* think and do foolish things, and allowance must be made for the fact.

For this reason, the supervisor should also have permission to *punish* the pupils for minor offenses when necessary. It may seem

dangerous to trust him with a power that is capable of so great abuse, and the Principal may naturally prefer to keep it in his own hands, but there is always a remedy for cruelty or injustice in the exercise of this duty, to wit: the discharge of the supervisor and the appointment of one who will exercise more discretion. Any misbehavior, however, which calls for exceptionally severe discipline, should be reported to the Principal and the punishment left in his hands.

And it is of the greatest importance that the supervisor should always be upheld by the Principal in the presence of the pupils, when a complaint is made against him, or a pupil is brought forward for punishment, even though the Principal believes that the supervisor is in the wrong, for it is discouraging to the officer and prejudicial to the cause of good order to have a pupil go out among his mates and boast that he was right and the supervisor wrong. If it is necessary to admonish the supervisor, it should be done in private, and the remedy of dismissal for continued wrong doing, whether intentional or not, always remains.

He should have charge of the study-room in the evening, for he knows the characteristics of each pupil, while a teacher very often does not even know the names of those who are not members of his own class, and, besides, there will then be one code of rules for the government of the room from one end of the school year to the other, while, if the duty is delegated to the instructors, the weekly change in the care taken will, as Mr. B. D. Pettengill has well observed in an article in the "American Annals," be likely to prevent any *regular* system of management from being carried out, the different managers often having very different ideas in regard to the extent of liberty that should be allowed to boys, and differing very much in their ability to make themselves respected and obeyed.

Besides these, the supervisor should have charge of the Sunday school, say grace in the pupil's dining-room, and if he be the right man for the place, there is no reason why he should not take turns with the instructors in conducting the chapel exercises. He should see that the pupils are always neat and clean, that every possible provision is made for their comfort, and perform such other duties as naturally come within this province.

To manage the pupils successfully the supervisor must gain their good will and affection, and their hearty coöperation in maintaining good order. If he has sufficient tact to avoid antagonizing them he will seldom be obliged to resort to harsh measures for the enforcement of the rules. There are few boys who, if treated as gentlemen, will not act as such, and politeness and consideration go a great way, even with children. When possible to avoid it, a pupil should not be reproved or punished in public, as his dislike of appearing wrong in the eyes of his schoolmates will only confirm him in his obstinacy and bad behavior. If, however, it is ever necessary to reprove or punish publicly, the pupil should afterwards, when he has had time to cool down, be taken aside and reasoned with. This will generally remove all trace of ill-feeling towards the supervisor, and will render him much more tractable in the future.

It is well to be rather strict at the opening of the school year, in order that the pupils may become habituated to the observance of the rules. Afterwards it is wise to allow as much liberty as is consistent with the preservation of good order and the welfare of the children.

It is an aid to the supervisor to have the assistance of a number of the older pupils in the discharge of his duties, for these will have a personal interest in the maintenance of good order, and their example will be beneficial to the other pupils; but they should be selected by the supervisor, and not by the pupils, who would be inclined, by partiality and the hope of personal favor, to select their particular friends. But these assistants, not having arrived at years of discretion, and not being directly responsible for the management of the department, should on no account be permitted to inflict punishment.

Much more might be said on a subject of such vital importance, but the above salient points will, I believe, sufficiently indicate my ideas of the qualifications, rights, and duties of a supervisor of deaf boys, and of the best method of management.

Professor Gillett here took the chair.

DR. GILLET: The next paper to be read is "The Importance of Supervisors' Work," by P. J. HASENSTAB, of Illinois.

IMPORTANCE OF THE WORK OF THE SUPERVISOR.

It is of quite recent date that the supervisor's work has been recognized to be of great importance. Some institutions, usually large ones, assign the whole charge of the pupils of each sex to one or more responsible persons of the same sex. Several institutions still retain the former system of having instructors do the work by turns. Some appoint reliable pupils to assist in the monitorial work.

It was remarked some time back by one of our Principals, that a person appointed to the office of supervisor need not be expected to know the language of the deaf as much as the instructors. Such an opinion is a great mistake, and its application unjust to the deaf, inasmuch as a knowledge of the language is not only necessary to the proper discharge of the supervisor's duties, but is also essential to the welfare of the pupils, as it is the means of their understanding him and his understanding them. How can he, without a sufficient knowledge of the language, successfully supervise, when he must always be finding something to do for those in his charge, and this must be done through the use of their language? This requirement may, however, be modified in case of his being appointed to associate with a supervisor who has already remained for some time in office, and who knows the language and the pupils well.

It may be held that instructors, because of their immediate and constant interest in the deaf, and of their acquaintance with their peculiarities of character and difficulties, acquired in their school-rooms, can best perform the monitorial work. But should we not rather say that the proper apprenticeship of a teacher is in the office of a supervisor? For by reason of the valuable experience and knowledge of the various dispositions of the deaf which the supervisor acquires, he will then certainly succeed in the higher station. An objection to instructors doing this work is that they cannot grasp the various dispositions of the pupils, because they are with the pupils only as often as their turn comes around while the supervisor is with them constantly. To be able to grasp and remember the disposition of each one of the pupils, and then to treat each one as his disposition may demand, is of great value, and is a secret to success in supervision. It may seem plausible that supervision by instructors would be

offering to pupils ample opportunities to study and become accustomed to various methods of discipline; but it is not, for they are rather too young to judge of the merits and demerits of such various disciplines. It is generally their nature to be more or less mischievous, and to look upon discipline only as something to be resisted and evaded. The good supervisor's discipline is uniform, and pupils will work day after day with much less friction under his unvarying system. He is alone responsible for the general behavior of the pupils outside of school.

Still another objection presents itself to instructors acting as supervisors. They are expected to take enough time for recreation to preserve their vigor, and to make necessary preparations for the next day's work. To add the work of supervisor to their regular work would be refusing them a large portion of time demanded for recreation and such preparation. The release of teachers from the work of supervision would enable them to use their energies in the school-rooms to much better purpose.

Pupils appointed to do the monitorial work, often look down, by reason of their office, upon their fellow pupils. Thus do they often do their work rather rashly. On the other hand, the pupils naturally do not cheerfully mind such pupil monitors, and they are slow to obey them, except when they are immediate vehicles of command from the Principal or a teacher on duty.

Pupils coming to an institution bring thither the manners and habits which they acquire at home from their folks and companions. Some are refined, others coarse, and others very rude. At home they had their own various circles of association. Here they are all thrown together into a general circle, and their manners and ways are likewise intermingled. Naturally they will soon take to coarser manners but for the kind and firm control of their supervisor. Again, they all have had different methods of home training, before they came to school. Here a general method of training is before them, and new to them, and many resist it in various ways, and need a steady and unvarying hand to overcome their restiveness. The supervisor works with instructors in developing the moral character of the pupils. In school the instructors instil moral principles and good manners, and the supervisor takes care that they practice them outside of school.

A supervisor, because of his being in constant contact with the pupils intrusted to his charge, studies and understands their dispositions, peculiarities of character, and difficulties. With a good understanding of these peculiarities he can treat the pupils more fairly, and, in thus doing, win their esteem and confidence. They feel as though they have a brother in him, and will ever obey him without question.

Hearing children, when at home from school, are under the eye of their parents and guardians. Their wants are supplied, and their doings noticed, corrected, and improved. Briefly, their physical, intellectual, and moral conditions are looked after. Deaf children, at an institution away from their parents and guardians, constantly need some one to look after their wants and doings in like manner. This duty should be assigned to a supervisor, because of his constant contact with them and because he best understands their dispositions and difficulties. It is especially desirable that he be wise, observant, and far-seeing. If he can explain to them the evils of their doings without unduly wounding their feelings, and if he can even explain

those which have been done by others older and more responsible, without weakening their esteem for the doers, so much the better it will be.

A supervisor, in order to work successfully, must be of good character; must be courteous in his manners and considerate in word and deed; must have his temper under entire control; must study the peculiar dispositions and difficulties of those in his charge; must settle their disputes quietly and kindly; must be kind, yet firm; must lead, not drive; must show himself loving in all his work; must be ready to lift them from troubles and perplexities; and must always set them a good example. Walter Scott makes Ivanhoe say, "As the leader is, so will the followers be." A supervisor is a leader, not a driver. "He who can make a constant example of his habits of courtesy and cleanliness, Christian bearing, and high aspirations for excellence of character, will be able to improve the moral condition of others."

"Example is mightier than precept." Suppose a supervisor prescribe rules of propriety for pupils in his charge, and yet fail to observe some one of them himself, even in their presence, what is the effect? If they accuse him of the "beam in his own eye," can we wonder, or will we wonder, that his influence is greatly weakened? Thus patience and care are required of a supervisor to lead pupils to observe his rules. Let him exalt his office; command the respect of the pupils for it; remind them repeatedly that the supervisor is their leader; entreat them to aid him in whatever he may wish to do for their own good.

At the last convention, held at Jacksonville, Illinois, it was inquired "whether pupils give the respectful obedience to the commands of a supervisor that they are accustomed to give to those of a teacher, and whether it is best for the good order of an institution and the government of pupils" that supervision should be committed to teachers or to supervisors. I will try and give an answer to the first question, partly from my experience both as a pupil and as a supervisor, and partly from my observation. It depends on the nature of the command itself, on the manner in which it is given, and on the person giving it. It may be unnecessary to state these three conditions more fully than to say that a just command, well given, given by a well trusted person, would be cheerfully and respectfully obeyed. Not long ago a lack of acquaintance with the language of the deaf in the supervisor at a certain institution was the cause of serious trouble among the boys. At the Ohio institution there were once two hearing supervisors whose parents were deaf-mutes, and they had little trouble in their work. Again, there are two deaf supervisors at the Philadelphia institution, and they are doing very finely. Similar examples may be found in some other institutions. These examples may testify in favor of monitorial work by supervisors, and by supervisors acquainted with the sign language.

The first portion of this paper may serve for a response to the other question.

Observation and experience seem to show that deaf persons, once pupils at an institution, when wisely selected, are able to work more satisfactorily, by reason of their own experience with supervisors when themselves pupils, and of their knowing what should be done and what should not be done. But for certain reasons we would have *hearing supervisors also*. For an institution that can afford to have

two or more supervisors of each sex, it would be advisable that at least one of each sex should be a deaf person.

THE CHAIRMAN: The next paper is "Work Done in the Pennsylvania Oral School," by MISS EMMA GARRETT.

A SUMMARY OF WORK DONE IN PENNSYLVANIA ORAL SCHOOL FOR DEAF-MUTES, SCRANTON, PENNSYLVANIA, JUNE 18, 1886.

My school is at present a day school. It practically began September, 1884. It consists of thirteen pupils ranging from six to fifteen years of age. We have received many applications but can only admit at present such pupils as can attend as day pupils. We hope to receive State aid next year to enable us to establish a boarding school, as that seems to be the need of the locality in which our school is. I prefer day schools when practicable.

I am the teacher as well as the Principal of the school. There are eight pupils in one class, three in another, and two that require individual instruction. Owing to sickness and other causes, the average time that the most advanced class—consisting of eight pupils—has been under oral instruction, is about fourteen months; two of them had had some instruction in signs, and are consequently behind the rest of the class in speech.

My principal work has been to develop speech and language. If this work is well begun it will be a comparatively easy matter to instruct them in the ordinary English branches later. The pupils in this class talk with much freedom. They commenced arithmetic nine months ago and are all now able to do simple work in addition and subtraction. I have no period for original composition or letter writing yet, but encourage the children to talk constantly and correctly; and when they have any spare minutes, six of them are very ambitious to write letters, and from the fact that they are acquiring considerable language, they make creditable attempts. They have not been instructed long enough to enable them to write without some grammatical errors, but they touch upon many different subjects and nearly all their letters are intelligible in meaning, well written, and correctly spelled.

They write a great deal from dictation. The eight pupils referred to read my lips very well, and some of them read each other's lips well. Two of them lost hearing by sickness after acquiring some speech—one at six years of age and one at seven. One retained good speech, although his voice was weak; that of the other was imperfect. The first entered December 10, 1885. He has been taught a little geography since then. It is my intention to begin geography with the other seven next September. The work of the other pupils, most of whom have only been in school a few months, is in the same direction as the class of eight, but they are not, of course, as far advanced. One pupil has made but little progress, but I have not yet determined whether there is any mental deficiency, or whether he is only backward.

I have no pupils who had enough hearing to learn to talk before coming to school, but one girl has since developed considerable appreciation of sound. Two young pupils who entered recently give promise of being subjects for aural training.

Three of the pupils did not begin to learn to talk until they were fourteen years of age. We shall not see the best results of oral method *until this work is begun earlier*, and parents of deaf children

understand that they should treat their deaf babes *exactly* as though they heard, except that they should let the *deaf infant see words on their mouths many times where they would repeat them many times to the ear of the hearing infant.*

It has grieved me to learn that directions have been issued to parents, advising them to teach signs instead of spoken words to young deaf children, when there are instances on record that prove that their future speech would be so much better if they were early taught to speak.

If the school were larger I should classify it as I did in oral branch of Pennsylvania institution—placing semi-mutes, semi-deaf pupils, and congenital and practically congenital, each in separate classes; of course, sending semi-mutes and semi-deaf pupils to hearing schools as soon as possible. I sent a semi-mute from our school to a hearing school last September. (See "A Deaf Pupil in a Hearing School," January, 1886, number of "American Annals of the Deaf.")

Admirable as were the decisions of the Milan International Convention in 1880, I feel that not only should all new pupils be given oral method as it suggested, but that many pupils in sign schools could still attain to an intelligible speech and considerable facility in lip reading, if they were entirely removed from sign communication and surroundings. I would save every *new* pupil to oral method, but I know it to be possible to redeem many of the *old* ones, too.

The following programme of our closing exercises, held on June 26, 1885, may be of interest. The average time that class taking part in exercises had been under oral instruction was six months at that time; there was but one semi-mute member of the class, and she was not able to be present at the closing exercises.

Class gave dates—day of week, month, and year; number of days in a week; names of days; school days; days spent at home; number of months in a year; names of months; names of spring, summer, fall, and winter months. Names of last month, this month, and next month, each pupil in class repeating the answers in turn.

A clock face was drawn on the blackboard without hands. In same, each pupil drew hour and minute hands at certain times suggested by persons in the audience, and then told in speech what time it was, afterward writing it on the blackboard; for example, "It is twenty-five minutes of three o'clock."

Class counted up to one hundred—one pupil repeated the numbers to ten, the next to twenty, and so on.

Class wrote from dictation vowel sounds, marking with Worcester's dictionary marks, and also words containing all consonant sounds.

Class performed following actions and directions given from lips.

Walk to the door.

Stand up.

Run to me.

Come to me.

Point to the blackboard.

Go to your seat.

Touch the desk.

Shut the window.

Sit down.

Open the window.

They made following answers to the question, "What can you do?"

I can see.

I can jump.

I can talk.

I can sweep.

I can think.

I can laugh.

I can smell.

I can play.

I can walk.

I can sew.

I can run.

I can pick slate (in a coal breaker).

Class made following requests in speech:

Mamma, please give me a glass of water.

Mamma, please give me a piece of bread.

Mamma, please give me a piece of pie.

Mamma, please give me a cup of coffee.

Mamma, please give me a cup of tea.

Mamma, please give me a glass of milk.

Mamma, please give me some sugar.

Mamma, please give me a piece of butter.

Mamma, please give me a piece of meat.

Mamma, please give me a piece of potato.

Mamma, please give me some salt.

Mamma, please give me some pepper.

Mamma, please give me a knife.

Mamma, please give me a fork.

Mamma, please give me a spoon.

Mamma, please give me an apple.

Mamma, please give me some molasses.

Mamma, please give me some candy.

One pupil was asked, "Do you like apples?" She replied, "Yes, I like apples." "Do you like coffee?" "No, I do not like coffee."

Another was directed: "Put the book *on* the table;" "Put the book *under* the table."

Another was told: "Bring me the book;" "Take the book to Ella."

Another was asked in speech, "What have I in my hand?" Reply was: "You have a pencil in your hand." "What is that?" Reply: "That is a rubber."

"Whose rubber is it?" Reply: "It is Miss Garrett's rubber."

"Which book do you wish?" Reply: "I wish the red book."

Class took turns in speaking names of colors and pointing them out.

Pointed out square, round, and oblong objects.

Class spoke names of different pieces of money.

1 cent.

10 cents.

2 cents.

25 cents.

3 cents.

50 cents.

5 cents.

\$1.00 (one dollar).

Played store with cake and candy, one acting as buyer and the other as seller. Spoke the following:

"Please give me five cents worth of candy."

"Please give me five cents worth of cake."

Spoke names of some parts of the body in turn, and pointed them out in answer to spoken directions:

Show me your mouth; lip; head; eye; arm; ear; thumb; chin; neck; finger; back tooth; cheek; hand; side; nail; nose; foot; toe; knee; leg; face; tongue; elbow.

And some common articles of clothing: coat; necktie; cuff; vest, or waistcoat; shoe; handkerchief; pantaloons, or trousers; slipper; dress; shirt; glove; stocking; collar; button.

Class pointed out following in answer to direction:

Show me—

A strong man.

A new shoe.

A little dog.

An old shoe.

A red bird.

A wide room.

A white shawl.

A narrow room.

A yellow chair.

A green leaf.

A blue dress.

A large stove.

A small house.

A tall woman.

A short woman.

A sick girl.

A weak girl.

A pretty girl.

A good girl.

A good boy.

A long bench.

Class wrote the following, dictated from lips:

That dog is fierce.

That box is heavy.

That book is rough.

This book is smooth.

That house is ugly.

That house is high.

That apple is sour.

That colt is wild.

That knife is bright.

That boy is angry.

That cow is good.

Pupils went through exercises correctly and quickly.

The following is the programme of closing exercises on June 18, 1886, of same class after fourteen months oral instruction.

Class in turn wrote following on blackboard, dictated to them:

"We are glad to see the ladies, gentlemen, and children."

"School closes to-day, Friday, June 18, 1886. We shall have no school in July and August; — we call it our summer vacation."

"All the pupils in our class will talk every day to our fathers, mothers, brothers, sisters, and friends, and be helpful to them while at home."

Class did examples in addition and subtraction on blackboard, dictated in speech.

Examples of aural work. A child who did not speak a year and a half ago answered some questions through hearing as follows:

"What do I teach you?"

"You teach me to speak, to hear, and many other things."

Class gave a short account in speech of what men do in Prang's Pictures of Trades and Occupations—printer, farmer, gardener, tailor, shoemaker, blacksmith, housebuilder, carpenter, etc.

Class gave a number of examples of persons or people, things, animals, birds, fish, insects, reptiles, fruits, vegetables, flowers, and trees. Also wrote a number of examples of each.

Questions for the one pupil referred to who had received a little instruction in geography since January, 1886:

What do you understand by direction?

What are the four principal directions?

Point to them?

What else must we know beside direction of a place to find it?

What are some of the measures we use for short distances?

What are some of the measures we use for long distances?

Which measure should you use to find size of school-room?

What is the size of it?

How many inches make a foot?

How many feet make a yard?

How many yards make a rod?

How many rods make a mile?

What is the principal direction in Scranton?

In what direction?

How far is it from _____ and in what direction?

Name two streets

street?

Name two streets that cross it.

In what direction do they run?

What are the principal natural divisions of the earth?

What State do you live in?

What county is your school in?

What city is your school in?

Bound Pennsylvania.

What mineral is found in large quantities in and near Scranton?

What are the vertebrate animals? Give examples.

What are the articulate animals? Give examples.

What are the mollusk animals? Give examples.

What are the radiate animals? Give examples.

The semi-mute pupil whom I sent to a hearing school last September kindly consented to come to closing exercises and let the audience see his perfect ability to read the lips. He speaks German also, and reads it on the lips.

A lady of fifty years of age whom I have given private lessons in lip reading this winter also consented to allow the audience to see her read my lips. She could not understand me at first lesson. She now reads almost everything I say, rarely missing a word.

In my paper entitled "A Plea that the Deaf-Mutes of America may be Taught to Use their Voices," read before the Tenth Convention of American Instructors of the Deaf, held in Jacksonville, Illinois, in August, 1882, I said that I felt that there was but little to add to the evidence that we already had in favor of speech for the mass of the deaf, little thinking that four years would roll by and find the majority of the deaf children of this great and beneficent Government still under sign instruction.

It is true that a few new oral and aural schools have been started since then: my late school—the Oral Branch of Pennsylvania Institution for the Deaf and Dumb—which I established in Philadelphia in October, 1881, grew while under my charge to be a school of nearly eighty pupils in two and a half years, nine classes being formed in that time; the Voice and Hearing School for the Deaf, Englewood, Illinois; the Milwaukee Day School; Miss Mary S. Garrett's Oral School for the Deaf, No. 7 S. Merrick Street, Philadelphia; and my present young school in Scranton. But although thankful for these, I long for the time when *pure oral instruction* shall be general.

I cannot be satisfied while fifty-two out of sixty-four schools and institutions for the deaf in the United States employ the old sign system or combined system.

The Abbé Tarra, President of the International Congress of 1880, has had nearly thirty years' experience in teaching the deaf, first by sign method, then by combined method, and latterly by the *pure oral*. He says: "All deaf mutes capable of being taught by means of signs are capable of being taught by means of speech, without exception." He further says, that children who are being taught by oral method should be kept absolutely away from signs and the manual alphabet.

These true words cannot be quoted too often. We occasionally hear of deaf children who seem unable to learn to talk. This may be on account of some physical deficiency or simply because the child is slower in learning to develop than others. In the latter case more teaching is necessary for the ordinary child must be accomplished the result.

THE CHAIRMAN: We can now take a few minutes for the consideration of these papers.

MR. WALKER: I move that we defer discussion upon these papers until after the report on necrology is made.

This motion was seconded and carried.

THE CHAIRMAN: We now come, my friends and comrades, to the performance of a very melancholy duty. Who knows for which ones of us this duty will be performed at the next convention? There are familiar faces in my mind now, for they have been engraved on my heart, that we cannot look upon, and yet, I am accustomed so to believe and I feel, that though we see them not, still they are with us, and they see us. They know very much better than we know, the solution of those questions that we are endeavoring ourselves to solve. They have reached that place where the ear is indeed open, where the dumb tongue is indeed unloosed, and their interest in the work here is not lost because of their knowledge of the work beyond. The work is all one; life is one. This is but the ante-chamber of the real life. We are all in the primary school, and it will not be very long until we shall all of us be graduated into that one that is higher.

One of our American poets has said:

"There is no death. What seems so is transition.
This life of mortal breath is but the suburb of the life elysian,
Whose portal we call Death."

Those whom we shall try to honor to-day, did well their work. May we be able equally well to perform ours, and to follow on in their footsteps. I will now call upon the Chairman of the Committee on Necrology, Professor Job Williams, to present his report.

MR. WILLIAMS: Prof. E. A. Fay will read the notice of Miss Annie E. Bond.

PROFESSOR FAY: This notice was prepared by Miss ELLEN BARTON, who asks me to read it.

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His ability and gentlemanly demeanor won for him, at once, the confidence and cooperation of the Board of Trustees of the Tennessee school and they heartily supported him in his arduous work. To the pupils of the institution he was a kind and loving father; to the people among whom he had cast his lot he was always a gentleman—a friend; to his own family his death has been an irreparable loss. After more than sixteen years of faithful service to the State, to humanity, and to God, he fell asleep on December 24, 1882. It may truly be said that he rests respected, beloved, and lamented.

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In 1880 Mr. Martin was again appointed Superintendent of the Louisiana institution. Returning to his former field of labor, he entered upon the discharge of his duties with great zeal and with a determination to bring the school up to its former efficiency. But an insidious disease had marked him for its victim, and in less than two years he was compelled to retire from the vocation which had engaged, almost continuously, twenty-seven years of his life.

He died at Natchez, Mississippi, in the autumn of 1882, surrounded by near relatives and sympathizing friends. His sufferings were prolonged, and at times were very great, but he bore them all with fortitude, and entered into his heavenly rest with the calm confidence and blessed hope that attends the dying Christian.

W. S. MARSHALL.

July 21, 1886.

MISS HARRIET E. COGGESHALL, the subject of this imperfect sketch, was born at her father's consulate in the city of Quito. His death occurring soon afterward, the entire charge of her education devolved upon her widowed mother, a woman of marked force of character. In the fall of 1881, Miss Coggeshall took her place as one of the younger teachers in the Ohio institution, to fill a vacancy in the oral department, under the tutelage and advice of a more experienced associate. In this somewhat trying field of duty, she labored with more than average success, endearing herself by her gentle and winning bearing to pupils, fellow teachers, and officers alike. Always delicate in physique, her failing health compelled her, in the spring of 1883, reluctantly to leave her post, never to return. Her death, at the home of friends in a neighboring State, followed within a few weeks. Success not being measured by length of service, in the early demise of Miss Coggeshall we recognize a loss to the profession at large, as well as to the immediate circle which, in life, she graced.

BENJAMIN B. MCKINLEY AND MARY E. ZIEGLER.—Since the last convention, at Jacksonville, Illinois, two teachers connected with the Pennsylvania institution in Philadelphia, Benj. B. McKinley and Mary E. Ziegler, have passed away.

Mr. McKinley, at the time of his death, and for some time before it, was not actively connected with the work, having been retired on account of feeble health in 1875. In his retirement, however, he continued to manifest a deep interest in the welfare of the deaf, among whom he had lived and labored for upwards of forty years, and made frequent visits to the institution till physical infirmities forbade his venturing out of his room. He was a faithful teacher, a devout Christian, and patriotic citizen. Mr. McKinley died on the twenty-ninth of July, 1883.

Miss Mary E. Ziegler, a valued teacher, died November 15, 1883, at her home in Philadelphia.

The following is a list of her life: "Annals," January, 1884, of her associates:

Miss Ziegler was born near Carlisle, Pa., January 7, 1852. Her father was a settler of Pennsylvania.

She was prepared for the institution for the deaf, and entered it in the autumn of 1870. She was prepared

sentiments of all who knew her when over her casket he said the world was better for her having lived.

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This motion was seconded and carried.

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One of our American poets has said:

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This life of mortal breath is but the suburb of the life elysian,
Whose portal we call Death."

Those whom we shall try to honor to-day, did well their work. May we be able equally well to perform ours, and to follow on in their footsteps. I will now call upon the Chairman of the Committee on Necrology, Professor Job Williams, to present his report.

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fulness and his faith in God enabled him to look upon the bright side. His genial and spontaneous humor was refreshing and pure as a mountain rill. His quick and far-reaching sympathy was often extended to the poor and needy.

To the church in Hartford, of which Mr. Keep was an office bearer, his death was a great loss, for he was one of its founders, and his varied and unstinted self-bestowal was of unusual help to the pastor and people.

As a teacher of the deaf and dumb, Mr. Keep was enthusiastic, patient, and persevering. He had a tender and fatherly interest in his pupils, and daily carried into the school-room the sunshine of his own nature. In conducting religious services he was fresh, lucid, and practical.

Nor were Mr. Keep's services to the deaf limited to his own class and his own institution. His communications to the "Annals," though not numerous, were quite important, and his participation in conventions was profitable to all.

Mr. Keep published two books. One, "First Lessons for the Deaf and Dumb," the result of his own careful experience in the school-room, was welcomed at home and abroad; the other, entitled "School Stories," was designed for hearing and deaf children alike.

To know him was a privilege; to have had his confidence and friendship is a constant benediction.

MADAME VICTORINE BOUCHER, who died in April, 1883, was a French Catholic lady, who presided over the St. Joseph's Institute for Deaf Mutes at Fordham, New York, for thirteen years. She was beloved by teachers and pupils. At her request, no biography has been written. Madame Boucher, assisted by a number of charitable ladies, established the school for deaf-mutes at Fordham, New York, in the fall of 1869. Although in the beginning the undertaking had to struggle with great difficulties, and but for the loans advanced by friends from time to time would have sunk under the weight of its pecuniary difficulties, yet before her death she had the satisfaction of seeing the institution in a flourishing condition, with a branch house for girls in Brooklyn, and one in Throgs Neck, New York, for boys. By an Act passed by the Legislature June 2, 1877, it was placed on a footing with kindred institutions in the State.

ROSSELL H. KINNEY, born in Oswego County, New York, April 29, 1822, died suddenly at Austin, Texas, November 20, 1885. A graduate of Hamilton College, New York, he accepted the appointment of teacher in 1852 in the Ohio Institution for Deaf-Mutes at Columbus, and there remained from 1852 to 1863. He then entered upon the pioneer task of organizing and administering the Minnesota institution at Faribault, and was so occupied until 1866. In 1867 he resumed the work of teaching in the Ohio institution, and so continued until his acceptance of the superintendency of the Nebraska institution at Omaha in 1871. The cares and responsibilities of this office he sustained for seven years. In 1880 he had charge briefly of the affairs of the Colorado institution, at Colorado Springs. In 1881 he was appointed Principal of the Texas institution at Austin, and so continued until 1885, nearly to the date of his death at his home in Austin, after full thirty years of active service. He was a man of great earnestness and industry, and also of commanding conscientious principle. He loved deaf-mutes, and was laborious and self-sacrificing in *their service*. He availed himself of all opportunities of normal

improvement, and sought always, abandoning the valueless and the worn, to be in the front rank of instructors of the deaf.

JOHN D. H. STEWART.—Among the specimen work of pupils embodied by Superintendent Stone in his report of the Ohio institution for the year 1853 may be found a carefully written little sketch of John Sobieski, evidently the painstaking production of one congenitally deaf, and signed "J. D. H. S., fifteen years of age, and under instruction five years." This is the earliest trace accessible to the writer of this brief memoir of one whose death, untimely from our human point of view, saddened the westward progress of many delegates to the Eleventh Convention of American Instructors of the Deaf—John D. H. Stewart, of Ohio. Among the earlier graduates of the Ohio institution he afforded a living example of what could be accomplished by the pioneer instructors of deaf-mutes in this country when their efforts were seconded by conscientious self-help on the part of the pupil.

As a student and as a teacher Mr. Stewart was notably a hard worker. His mind was one not contenting itself with aught short of exact knowledge, exactly expressed. So far did this bent carry him that, as the writer well remembers, on his recall to institution work as an instructor by Superintendent Fay in 1868, Mr. Stewart had to a great extent lost his facility in signs through disuse, obviously preferring dactylology as a more precise, if less rapid, vehicle for his thoughts. He soon yielded to the pressure of circumstances, however, and, aiming less at grace of pantomime than at force and directness of expression, swift and energetic sign converse became characteristic with him. Ever a keen and careful observer, he excelled in portrayals of life and character. Of solid build physically, his intellect delighted in handling solid facts and impressing them upon the minds of his pupils; always ready with anecdote or narrative to beguile the tedium of class-room toil. A man of extensive reading, and possessing to a degree attained by few of the congenitally deaf in our country a ready command of clear and idiomatic English, his self-acquired knowledge enabled him to stand shoulder to shoulder with his liberally educated coworkers.

In his love of nature and research after fact Mr. Stewart was an enthusiast. Indeed to this trait of his character may be traced the causes hastening his death. He had looked forward to this trip across the divide in pleasant company with the keenest anticipations of enjoyment. Starting in his eagerness in advance of the main body of excursionists, he joined them when well en route, and from that time on, till this journey of a day and his life pilgrimage together reached their close, he was among the foremost in every sight-seeing enterprise. Realizing from his first prostration that the end was very near, he met the inevitable with Christian fortitude, and while gratefully accepting the ministrations for his relief so freely, and, alas! so unavailingly rendered by his friends and traveling companions, his spirit calmly passed beyond that greater divide, so inscrutable and yet so narrow, that separates us all from the realities of eternity.

Occupying as he did a field peculiarly his own, his Alma Mater cannot but feel his loss. And though his work may be taken up by another, linking as he did "things old and new" in the history of the Ohio institution, John D. H. Stewart may justly be classed among

those of whom it may truly be said, "We shall not look upon their like again."

GEORGE ANTON SHOAF.—July twenty-first will be remembered by the delegates to the convention at Berkeley as the closing day of a brilliant session. On that day, at half-past six o'clock in the morning, George Anton Shoaf, a delegate accredited to the convention, but who never took part in the proceedings, died. Three weeks before, he had caught a cold which resulted in an abscess of most aggravated form. It was his hope to recover in time to grasp once more the hands of the old friends he once knew at the New York institution. But a complication that baffled medical skill set in, and the fatal moment came.

He was twenty-two years old, having been born in Omaha, Nebraska, in 1863. At the age of seven years he lost his hearing through scarlet fever. In his case we see one of those fireside heroisms where a mother nurses back to life a child whom doctors have given up. At eight years old he went to the New York institution and stayed two years as a boarder in Dr. Peet's family. His parents moving to California, he entered the institution there in 1875. Eventually he entered the class of '86 at the State University. But a course at the University calls for an indomitable pluck which was not his, and he began his junior year only to give up the course for a position at the institution as supervisor. He was popular among both the boys here and the students there. Up to the time of his death he belonged to the University football team which now holds the State championship flag. Yet the young man with broad shoulders and biceps like a Samson, was summoned before his time. His death, in the flower of his youth and the beginning of his usefulness, is one of those inscrutable providences to which we bow in humble submission, without seeking to know the reason of Him who doeth all things well.

MR. WILLIAMS: Considering the circumstances of the death of J. D. H. Stewart, of Ohio, it has seemed proper to offer the following resolution:

In view of the sudden and untimely death of Mr. J. D. H. Stewart, at Salt Lake City, Utah, July 12, 1886, while en route with us to attend this convention—

Resolved, That we extend to his bereaved wife, in her unspeakable desolation and sorrow, our tenderest interest and sympathy.

That in his death we deplore the termination of a life eminent in its success and usefulness, and in its unobtrusive exhibition of the best traits of Christian character.

That in the fatal issue of his sickness, anticipated by him, and yet not feared, we recognize, humbly and submissively, the dark cloud ever attendant upon human frailty, yet with him not unlighted by the bright reverse of heavenly hope.

That a copy of these resolutions be transmitted to his bereaved wife by the President of this convention.

DR. I. L. PEET: I can say from the fullness of my heart that Dr. William Porter rendered a very great service to the New York institution, by taking it when the sanitary conditions were imperfect, and bringing it to a condition in which there was no public institution in the city, or in the State, which was superior to, if equal to it. He was a man of fine personal presence, of very kind heart, very sympathetic, and inexorable in the discharge of what he considered his duty, but always endeavoring to make life in the institution pleasant to the pupils and to the teachers. My relations with him were of the most agreeable character; and, whether it was the grace of God in him, or in me, that made a delightful association of ten years in the *New York institution*, under what has been called two heads, it is

certainly the case that that institution was admirably conducted, so far as he was concerned, in every respect, and that I was enabled, through the association with him, and the assistance from him, to devote myself absolutely and entirely to the important work of teaching the deaf and dumb. He was there ten years in the institution. He completed his work there by bringing it to a condition of remarkable excellence, especially in a sanitary point of view. We had no sickness and no death for years there, and every one connected with the institution learned to feel a true respect and regard for him. He was a Christian, a gentleman in every sense of the term, and when he finally retired from the institution to take a tour in Europe, instead of regaining the health which had begun to be feeble, he lost it, and he died at his home in New York State, mourned by all who knew him.

The following obituary notices were then read: Richard S. Storrs, William B. Swett, William D. Cooke, G. E. Gibson, A. B. Lister, Dr. Thomas MacIntire, and R. H. Keeney.

RICHARD SALTER STORRS was born at Amherst, Massachusetts, September 29, 1830, and died at Longmeadow, Massachusetts, August 31, 1884. Mr. Storrs was graduated at Amherst College in 1852. Descended from a long line of ministers, with a rich inheritance of mental and moral qualities, the aim of his life had been to prepare himself for the Gospel ministry. The condition of his health turning him from that calling, he was providentially led, through his sister's infirmity, to enter the profession of deaf-mute instruction. He became a teacher in the American Asylum, at Hartford, in 1853. In 1864 he accepted a professorship in the National Deaf-Mute College at Washington, and for two years rendered most efficient aid to its young President in putting the college on a solid basis. In 1866 he returned to Hartford, where, with the exception of the two years above mentioned, his whole professional life was spent. As a teacher, Mr. Storrs had no superior and few equals. He loved his work, and threw his whole soul into it. He went down to his pupils, took them by the hand, and gently led them over the rough places to a higher plane. Quick to apprehend their difficulties, his fertility in expedients and readiness of invention enabled him to show them how to overcome them. Systematic in everything, he always knew just what he had taught. His pupils were led step by step from the easy to the difficult, and all the while they trod upon solid ground. They did not see the paying of the way, but it had been done for them all the same, and they walked securely. He inspired in them love, confidence, admiration, and they followed him without reserve. Full of wit and humor, Mr. Storrs gave full play to those qualities in the class-room, yet such was his dignity that no pupil dared to overstep the bounds of propriety. Vigorous and clear in thought himself, he cultivated and demanded the same qualities in his pupils. Lazy or slovenly work he would not brook. Above all, he strove to cultivate Christian manliness and womanliness in his pupils. Mr. Storrs possessed a mind of rare analytical power, which worked with surprising rapidity and grasped as by intuition every salient point of a question. It seized upon the broad, general principle which lay at the foundation of any subject, and viewed it from that standpoint. Conclusions reached, his rare gift of language enabled him to state with remarkable clearness and force.

In the death of Mr. Storrs, the profession lost one of its most suc-

THE CHAIRMAN: We can now take a few minutes for the consideration of these papers.

MR. WALKER: I move that we defer discussion upon these papers until after the report on necrology is made.

This motion was seconded and carried.

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Edward Everett Hale, her beloved pastor and friend, voiced the

sentiments of all who knew her when over her casket he said the world was better for her having lived.

The following obituary notices were then read: Joseph H. Ijams, of Tennessee; Adolphus K. Martin, of Louisiana; Madame Victorine Bouche, and Harriet E. Coggeshall; Benjamin P. McKinley, Miss Mary A. Ziegler, J. A. McWorter, Miss Cornelia Trask, Miss Katie Getty, Miss Jennie C. Cramer, John R. Keep, J. D. H. Stewart, and George A. Shoaf.

JOSEPH H. IJAMS was born in Rushville, Ohio, December 11, 1840, where his parents had lately moved from Maryland. During the connection of his brother, Rev. W. E. Ijams, with the Iowa institution, Mr. Ijams became interested in the cause of deaf-mute education and acquired a clear and graceful use of the sign language. He was, in turn, a teacher in the Iowa school and in the Columbia institution at Washington, D. C. In 1866, upon the reorganization of the Tennessee school for the deaf and dumb, which had been closed during the war, Mr. Ijams was chosen to take charge of that institution. The task before him was no easy one. The buildings and grounds having been occupied successively by the contending armies for hospital purposes and otherwise, were defaced and unsightly, all furniture and school appliances were destroyed or carried away, and the whereabouts of former pupils or other deaf children unknown; but Mr. Ijams went at the work before him with an enthusiasm and energy rarely equaled, and soon his untiring efforts, seconded by a wise discretion, resulting in the building up of a flourishing and well ordered school; the whole administration of which was alike creditable to his head and heart. Mr. Ijams possessed rare executive ability, and while he was a man of decision and firmness, his courtesy and kindness toward pupils and assistants made it a pleasure on their part to carry out his will.

His ability and gentlemanly demeanor won for him, at once, the confidence and coöperation of the Board of Trustees of the Tennessee school and they heartily supported him in his arduous work. To the pupils of the institution he was a kind and loving father; to the people among whom he had cast his lot he was always a gentleman—a friend; to his own family his death has been an irreparable loss. After more than sixteen years of faithful service to the State, to humanity, and to God, he fell asleep on December 24, 1882. It may truly be said that he rests respected, beloved, and lamented.

ADOLPHUS KERR MARTIN was born and reared in Mississippi. He received a classical education, studied for the ministry, and devoted several years of his young manhood to the work of a colporteur and missionary for the Presbyterian Church, in the remote settlements of the Southwestern States and Indian Territory.

In 1855 Mr. Martin was elected teacher in the Missouri Institution for the Education of the Deaf and Dumb. Two years later he was called to the Superintendency of the Mississippi institution, which position he retained until 1861, when he took charge of the Louisiana institution. Owing to disturbances growing out of the civil war the school was closed in 1862, and was not again opened for four years.

During this time Mr. Martin remained at Baton Rouge, taking care of the buildings and grounds of the institution. He then returned to his former home in Mississippi and engaged in agricultural pursuits until called again in 1871 to the position of teacher in the Missouri institution. For nine years he labored faithfully and suc-

just, generous, positive in his opinions, and conscientious in rendering to all that earnest service which his relations demanded. The institution in all its parts felt the happy influence of his connection. The officers in charge felt that in him they had a helper in promoting and maintaining the moral healthfulness of the institution; the teachers were assured that in him they had a fellow laborer without guile; the pupils recognized him as a true friend, ready to bear their burdens and help them in mental conquests. All officers, teachers, pupils, and employes loved him, and now mourn him as dead. Such a character commands respect and love. In the death of such a man the world loses that which is above price.

GIDEON E. GIBSON was born in Iredell County, North Carolina, on the thirtieth day of October, 1860, and at the age of about ten years was admitted into the North Carolina Institute for the Deaf and Dumb and the Blind. Possessed of qualities usually found in good and bright scholars, he made very creditable progress in his studies, and promised to be one of the brightest ornaments of the deaf community. Good natured, generally humorous, and fond of fun, he endeared himself to many, and was popular wherever he went. He was, as his father called him, "the idol of his home folks." Upon the completion of his eight years' course of study he was appointed supervisor. His amiable disposition and good sense made the performance of his duties in that capacity easy and successful. He also assisted in the instruction of a class of beginners. The next term he was promoted to the position of teacher of a primary class. His success in this new field of labor was such as soon won him the praise of many and gave an earnest of great usefulness. But his career was indeed a short one. When he left the institute in 1881 for his home, the conviction forced itself upon every one that we should never grasp his hand again on earth. He had been suffering from repeated hemorrhages from the lungs. His struggle to free himself from the clutches of that terrible disease, consumption, and at the same time to perform his duties as teacher, had excited the deep sympathy of his many friends. While at home, during the vacation of '81, he gradually grew weaker, and was compelled to resign his position as teacher in the institution. As the winter months approached it was evident to all that he was rapidly passing away. He was perfectly resigned to his Master's will, and longed to depart and be with Jesus whom he had tried to serve faithfully. February 21, 1882, was a very bright morning, but he watched the clock and told his friends who stood around him, that he would expire before ten o'clock P. M. He talked much—had a glimpse of heaven—was perfectly conscious all the time. True to his words he drew his last breath just before ten o'clock. Such was the close of a young life, rich in promise of increasing usefulness and success in teaching the deaf.

DR. THOMAS GALLAUDET: I can only recall the memory of one of the most painstaking, upright men I have ever met with. Dr. Peet could give more details of his early life, but I remember him as a pupil of the New York institution in 1845. He was noticed at that time as being remarkable for his compositions in the school-room, on occasions of public exhibition, etc. His productions were all looked for with interest. In due time he was chosen a teacher in the Delewan institution, and remained there for a number of years. He married one of our deaf-mute ladies in New York, Eleanor Langlois, and both of them being of a frugal and economical turn, they both taught in

in the work of deaf-mute education seven years. She served six years in the Western Pennsylvania institution, the latter part of the time under the lamented Thomas MacIntire, whom she counted among her warm personal friends. The last year of her life was spent in the Nebraska institute. As a teacher she was able, kind, and conscientious. She was pleasing in her manners, social and mild in disposition, in character Christian. She was a member of the Presbyterian Church and died in the hope of Him who doeth all things well.

PRESIDENT GILLET: This certainly is a most formidable array of our friends, brethren, and sisters who have passed on before us within the last four years, to prepare, or assist our Lord in preparing, the mansions which He has gone to prepare for us. He tells us that we shall be like Him. If we are to be like Him, we shall do as He does. Those friends, certainly, are doing as He does; and we have the delightful consolation, in the midst of this melancholy service, of knowing that they are engaged with Him in making preparations for us when our time shall come to pass on. My heart has been filled with unspeakable emotions this afternoon, as I have run back over the last thirty-three years, since the time I sat first in the convention with some of those who have been mentioned here to-day. I knew most all of them; all of them were my friends, and one of them was my preceptor; and another was to me a sister, and another was as a child. I shall never forget the scene when Miss Cuddy called me to her bedside and said, "I am not afraid to go, and I want you to be careful for nothing; but with prayer and thanksgiving, make your requests known unto God; and the peace of God, which passeth all understanding, shall keep your heart and mine through Christ Jesus," and soon passed away.

I must not indulge this afternoon in the remarks that would come flowing from a sad and full heart. It was moved that we defer discussion until after these notices had been read. I think, certainly, our feeling is rather not to engage in discussion any further this afternoon; but as soon as we may, out of respect to the memory of these departed ones, adjourn. We, however, see hanging upon the wall here the portrait of him who introduced this work into our country. We are all aware that a movement is now being made to erect a suitable monument to his memory. I think it would be very fitting and proper that we take some recognition of the fact at this particular time. And I understand that some resolutions have been prepared looking to that end, and that they are in the hands of Mr. Crouter, and with your consent I will ask him to read them.

MR. WILKINSON: It is my sad duty to add another name to this long list that has been read this afternoon. George A. Shoaf died this morning at six o'clock. He occupied an humble position in this institution—that of supervisor. But from the papers read this morning, and from experience of our Superintendents, we all know how important that office is. I shall not take up time giving any biographical sketch, or speak now of the virtues of the young man who has so suddenly passed away. But I would offer a resolution that his associates and deaf friends, Mr. D'Estrella, Mr. Tilden, and Mr. Grady, be appointed a committee to prepare a biographical sketch or notice of Mr. Shoaf, and, if not completed before the close of this convention, that it be incorporated in the proceedings of the convention.

This motion was seconded and carried.

MR. CROUTER then read the following resolution:

MR. PRESIDENT: I desire to call the attention of the members of the convention for a short time to a subject that has attracted much notice and interest, especially among the deaf, during the past year. I feel that this convention will not have fulfilled its whole duty, or completed its labors here, if it adjourn without taking some action upon the subject. I refer, Mr. President, to the contemplated monument to be erected to the memory of the elder Gallaudet, in Washington, for the prosecution of which work funds are now being collected in many parts of the country. It is a worthy project—one that ought to be dear to every friend of good and philanthropic effort. Thus far the labor of collecting funds has been carried on, mostly by the deaf, with encouraging results, some \$4,000 having been raised, but I feel that the time has come when we, as officers and instructors, should give some united aid and encouragement toward the successful prosecution of the work. I would, therefore, Mr. President, offer, with reference to this matter, the following resolutions, which I feel assured will be approved by the members of this convention without a single dissenting voice, that:

WHEREAS, The Rev. Thomas H. Gallaudet, in founding the American Asylum at Hartford, Connecticut, began a work that has revolutionized the condition of the deaf in America, that has elevated them as a class, and brought them from a condition of darkness to that of enlightened manhood; and whereas, his work and worth commend him, not only to every deaf-mute in the land, and to all engaged in their elevation, but to all mankind as well; therefore, be it

Resolved, That in no way can we testify to our reverence for the memory of Thomas H. Gallaudet, and to our appreciation of his labors, than by a hearty, generous coöperation in the efforts now being made to collect funds for the erection of a fitting memorial to his life and work; be it

Resolved, That it is the sense of this convention as a whole, and of its members as individuals, that every effort should be made to increase this fund and make it one commensurate with the object in view; be it

Resolved, That the Principals and Superintendents of institutions here assembled be earnestly enjoined to influence, in so far as they can, their respective Boards of Directors and Trustees, and the officers, teachers, and pupils of their schools, to contribute liberally, and in a manner becoming the importance of the object in view, to the Gallaudet memorial fund; be it

Resolved, That a copy of these resolutions be sent to every institution and school for the deaf in the United States and Canada.

This resolution was unanimously adopted.

MR. NOYES: I presume nearly all of the members, if not all, are aware of the fact that there is a special effort about to be made in England with reference to the unfortunate or dependent classes. That commission has been appointed to inquire into the condition of these classes, both in their own country, and also as to what is being done in the United States. I believe the President of the college at Washington has been invited to meet with that commission to give them information concerning the work in this country. And it appears to me that it is proper for this body to give our word of encouragement and sympathy, and to commend to that body so honorable a gentleman as the President of the college at Washington. And in consideration of that, I submit the following for the consideration and approval of this convention:

The Convention of American Instructors of the Deaf, meeting in California July 15 to 21, 1886, sends cordial greeting to the Royal Commission to Inquire into the Education of the Blind and of the Deaf in Great Britain and Ireland, and begs leave to express the hope that the labors of the commission may result in great and lasting benefit to the cause of education for special classes in the British Empire.

The convention learns with pleasure that the Royal Commission has invited Dr. E. M. Gallaudet, President of the National Deaf Mute College, and Chairman of the Executive Committee of this convention, to give information concerning the education of the deaf in the United States; and the convention takes this occasion to commend President Gallaudet to the Royal Commission as one who possesses, in the highest degree, the respect, confidence, and esteem of all American instructors of the deaf.

This resolution, being seconded, was carried unanimously.

DR. PEET: Some resolution should be passed expressive of the general sentiments of this convention, and I suppose that among th

other information which Dr. Gallaudet will convey to the Royal Commission, will be these resolutions. I will offer the following resolution, which I think may be of benefit to others in the convention, of the sentiment of this convention:

Resolved, That in the opinion of this convention, instruction in art is of special importance in the instruction of the deaf, as without its guiding and developing influence the peculiar tendency of the deaf-mute's mind to think in pictures cannot be taken advantage of, to place him on that plane in life to which he is best adapted, nor can that superiority in handicraft of whatever kind which he is capable of attaining be placed within his grasp.

This resolution, being seconded, was unanimously adopted.

MR. CROUTER: The Executive Committee report that a recess be taken to-morrow morning and afternoon, and that a session be held to-morrow evening at half-past seven o'clock. At that time a lecture will be given before the convention by Theodore A. Lord, Esq., on the "Samoan Islands," to be followed by closing exercises.

Here the convention adjourned until to-morrow (Wednesday) evening, at half-past seven o'clock.

WEDNESDAY EVENING, JULY 21, 1886.

Mr. Crouter in the chair.

THE CHAIRMAN: The next subject to be considered is "Aural Work," by Mr. Gillespie, of Nebraska.

MR. GILLESPIE: As we understand it, our object in meeting together, is to discuss the different methods and systems of teaching the deaf and dumb. The methods practiced in the sign schools, the methods practiced in the articulation schools, and in both schools, and in every conceivable form, have been discussed in this connection. Now the last feature seems to be one that takes in the cultivation of hearing as well as that of speech. In a paper presented by my friend from Pennsylvania, the deaf are classified into three divisions, or subclasses, and he teaches them in two divisions, as I understand it; the congenitally deaf in one division, and the semi-mute and the semi-deaf in another division. I agree with Mr. Crouter in that particular. We have practiced that method in our own school for the last two or three years of dividing the classes, and of teaching the semi-deaf with the semi-mute aurally.

Now, I will go one step further than Mr. Crouter does, and will divide that class, teaching them separately—the congenitally deaf, the semi-mute, and the semi-deaf, making in all three distinct divisions taught by three distinct methods! The methods which will apply to the semi-deaf will not apply to the semi-mute. In the semi-mute we have a boy or girl without hearing, and our object is to bring out and cultivate this dormant sense. I presented a paper at the last conference or articulation convention in New York, and very nearly the same paper was printed in the "Annals," and what I had to say I said at those times. On the present occasion I shall let others speak through me.

I prepared a list of questions and submitted them to the Superintendents of the institutions, and I have received replies from thirty-five of them. The inquiries had in view the number of semi-deaf in

the schools, the tests made during the last year, the number taught wholly aurally, and I will present a few of these statistics for your consideration.

The first question was, "Has there been a general test of the hearing made in your school?" Out of the thirty-five institutions heard from twenty-two answered in the affirmative.

The second question is, "How many have you found with sufficient hearing to distinguish vowel sounds?" The answer from those twenty-two institutions is eighty.

The next question is, "How many have been taught wholly aurally?" The answer to that is thirty-five. That includes our own institution.

The next question is, "How many are taught both aurally and orally?" By this question I meant to bring out how many were taught with a view to cultivating the hearing. Whether the Superintendents all answered it in that way I cannot say, but I think they did. The answer is three hundred and ninety-nine.

"How many were taught aurally previous to the year 1885?" The answer is fifty-three.

The question is, "What is aural teaching?" In a previous article I have put the figures at fifteen per cent of our children at school that have sufficient hearing, though dormant, to be developed. And of that number the majority, I claim, could be graduated as hard of hearing and speaking people, instead of deaf-mutes. And by neglecting this training they would be graduated as deaf-mutes. Our object is to bring them just as near to speaking people as it is possible to do. My experience has convinced me that fifteen per cent is not too low an estimate. What we have done in the last two years is just to carry on the work as represented before. Quite a number of the teachers here present will recollect the convention in New York, in which a full description was given, and I will not go into that now. In the first place, before I go further, I will say that we had prepared a number of object lessons, and our aural teacher, Miss Plum, was to be here, and started, but owing to sea-sickness on the desert she was obliged to stop at Colorado Springs, to my regret and inconvenience. She has prepared papers since we left Colorado Springs, and forwarded them to me, and some of them I will read.

I will first read Miss PLUM's paper, though I do not say that I shall absolutely indorse everything that she would say:

A YEAR'S WORK.

At the opening of this work it may be well to define what the aural method means to us. It is educating the brain to use the hearing so that speech may be gained. A speaking child enters school knowing words by sound and soul. He needs to be taught the sight of all ordinary ones and becomes possessed at once of the key that unlocks to him the temple of knowledge.

Our pupils come to us with nothing but powers waiting to be developed. It is the work of the aural teacher to cultivate these, which are, the hearing, the mind, and the voice. How we have done this, it is the object of this paper to show.

Trying to come as near nature as possible, we have used what may be called a "natural method." Taking a picture dictionary the child looked over it until a familiar object was found whose name w

easy to reach. This was pronounced in his ear "bee." His first effort at imitation resulted only in the enunciation of the vowel, but we were thankful that his hearing had so caught the word that he knew what was meant when it was again spoken.

Following this plan with a few nouns and the pronoun "I," the verb "see" was given and for "busy work" the class wrote:

I see a bee.
I see a door.
I see a boy.
I see a cat.
I see a pin.

As soon as the word was recognized by the ear and spoken, it was written for the class to copy. Work like the preceding occupied the first month of school and with the second month the word "have" was introduced.

One of the little girls had a breastpin, which was not the happy condition of the rest, and she was taught to say:

"I have a pin," while the others said, "I have no pin."

Pointing to my mouth I questioned them as to their possessions in that line—yes, they each had a mouth but did not know what to call it. Having heard its name they could triumphantly say, "I have mouth," which was changed to, "I have *one* mouth."

Now this word, as all others, was learned through the hearing, and when spoken in the trumpet every finger and voice gave indication that it was understood. There is some difficulty with words that are like. They look alike on the lips, but, in time, even the slightest shades of difference in *sound* are distinguished.

From the mouth, we proceeded to other parts of the body and there began our arithmetic. The little ones said:

I have one mouth.
I have one nose.
I have one neck.
I have one tongue.
I have one chin.
I have two ears.
I have two eyes.
I have two arms.
I have two hands.
I have two lips.
I have two cheeks.
I have two toes.

Frequently they had spelling exercises, and wrote and spoke the words given in their ears or through the trumpets.

Before leaving this point they were taught my name and the word "has." The verb came in by merely saying: "Miss — have one mouth." No; "Miss — *has* one mouth."

Now, the names of the class were learned and exercises with the verb in the third person were used, as—

John has two eyes.
Mamie has two ears.

With the pronoun "you" came several new words, as—

A dress.
A black dress.
Two shoes.

A white apron.

Here the verb "is" (which can only be taught by its use) was necessary. With this verb, the pronouns "my" and "your," and the possessive case of the nouns, we made—

My dress is black.

Mamie's dress is blue.

Ernest's hair is brown.

Your hair is black.

My eyes are blue.

Color lessons were given by matching different colors of paper with any articles in sight, as—

The paper is red.

Fannie's dress is red.

Your ribbon is red.

The book is red.

And so on, until they were familiar with the most pronounced colors.

At this time they began to write descriptions of one another. A note-book gives us this:

Mamie Hall is fat.

She has blue eyes.

She has yellow hair.

She has a red dress.

She has a white apron.

Her shoes are black.

She has a gold pin.

She is pretty.

For question work we gave sentences in this form:

John's eyes are —.

Eddie has — hair.

Nettie has a — dress.

— apron is white.

During this time there has been a daily exercise in action work. Performing the action I say, "I ran," then command, "John, run." The class say, "John ran," while he writes, "I ran." In easy actions we have used "ran," "walked," "hopped," "danced," "opened," "shut," "sat," "washed," "held," "folded," "laughed," "cried," etc., giving the command in the present tense and having it spoken in the past, when finished. I say, "Fold your arms;" obeying, the child says, "I folded my arms," or, all obeying, say, "We folded our arms," "You folded your arms."

Now they had some questions in a written form, as—

What did you fold?

Who marched?

Who held the coat?

Who opened her mouth?

Again were given object lessons. With the picture of a cow in view they tell me—

"The cow has feet;" but I write,

"The cow has hoofs," and they see the difference of the name. Now with the written form of "How many?" I ask—

How many hoofs has a cow?

How many horns has a cow?

How many eyes has a cow?

How many legs has a cow?

We have a set of Prang's Natural History Cards, and have used for this class the cow, horse, sheep, dog, deer, eagle, duck, all of which they learned to describe as stated.

Using Appleton's Reading Chart we have found ample scope for teaching names, prepositions, and action words. This has been quite written up in the "Auralist," but may bear repetition here. The picture used in our examination was a farmyard scene, and had been taught thus: The names of every object, then—

Where is the man?

What is he doing?

What is on the fence?

How many chickens do you see?

Where is the water?

Where is one little chicken?

Answered—

The man is near the fence.

He is walking.

A bird is on the fence.

I see eight chickens.

The water is in a pan.

One little chicken is in the water.

Thus we go on just as other teachers, except that we give words to the *hearing* as well as to the lips and mind. Our pupils do not learn more than do others—perhaps not much—but they *feel* they have a hold on the world that their less fortunate schoolmates have not. In one year we have used five hundred and ninety-two words, including those used for arithmetic, which were the numbers from 1 to 20, applied in all sorts of "examples."

Now, this is an outline of the year's work. The child sees an object, *hears* and speaks its name, and then learns its written form. Thus he gains what signs and articulation would teach him, but best of all has power to *hear* what he has learned.

Let us have more of it.

MR. GILLESPIE: Now I will read a paper from PROF. E. R. CURRIER.

A METHOD OF AURAL INSTRUCTION, SUGGESTED BY EXPERIMENTS FOR THE DEVELOPMENT OF HEARING, AT THE NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE DEAF AND DUMB.

"All method is a rational progress,
A progress toward an end."

The recognized systems of instruction, by means of which the deaf and dumb of the present time are brought out from the narrow confines of a solitary, soundless existence, in which their infirmity has placed them, are the results of unwearied labor and exhaustive experiment, for more than a century, on the part of their instructors, who, actuated by a single desire, that of placing this class of defectives upon the social plane occupied by their hearing brothers, have, by patient, philosophic, and prayerful persistence, so nearly obliterated the barriers which surround the unfortunate condition of living that deafness imposes.

A retrospective contemplation of these philanthropic endeavors reveals to us, that, although very much has been accomplished, since the educational necessities have been so thoroughly provided for that there can no longer be a reasonable doubt in regard to the surest methods by which the deaf shall be taught the existence of a Supreme Being and their relation to Him; the duties they owe to their country and to their fellow men; something more remains to be done before

we can assert that the goal has been attained. Our future investigation and endeavor must furnish a satisfactory solution of, at the lowest estimate, two important and pressing problems: How can we give to the deaf the ability to communicate with greater accuracy and to receive communication with greater ease from the world at large? And, how and to what proportion of this class can we, by aural development, give available hearing?

To the latter question, I shall ask attention, in the hope that an increased interest may be awakened, which shall be productive of benefit to at least a portion of the deaf now under instruction in the institutions of America, it having already been ascertained that there are in every school for this class a number, larger or smaller, who are enabled by the use of some form of instrument to perceive voice sounds; and also, because some study has been directed to the possibility of bringing those possessing a remnant of hearing, to such a condition that they can readily comprehend our language when addressed to the ear. Hearing may be defined as that perception of the mind by which, through the mechanism of the ear, a knowledge of the vibratory motions of bodies, which constitute sounds, is obtained. In its normal condition, the external ear collects the sound waves and reflects them upon the membrane of the tympanum; this membrane then facilitates their transmission to the chain of small bones in the tympanic cavity, or middle ear; to the walls of this cavity and to the air it contains; thence to the oval window, from which the vibrations are communicated to the fluid of the labyrinth, or inner ear, until finally they are received by the filaments of the auditory nerve, by which the sensation is imparted to the brain.

In using the phrase "aural development," we of the New York institution have in mind the systematic training of an ear in abnormal condition to perform, with the aid of mechanical contrivance, the operations just described. The defective ear, as found in the so called deaf and dumb child, either from pre- or post-natal changes, is incapacitated for the transmission of sounds *per se*, and the functional action intended by nature can only be secured, if at all, by the employment of artificial aids. Qualified by instrumental assistance to perceive sounds, the condition of the acoustic mechanism of this class of children for practical audition, then, is not widely different from that of the hearing child at the age when he begins to attach significance to sounds. It must, therefore, be susceptible to the same influences, because the existing abnormality has thus, in a great measure, been compensated for. It becomes evident, then, that the affording an opportunity for such ears to become acquainted with all classes of sounds will secure, not only a gradual realization and appreciation of their different values, but, at the same time, will tend to arouse to life and action the heretofore dormant vocal organs, owing to the fact that the comprehension of sounds addressed to the ear always stimulates as well as facilitates the inclination to imitate them. Endeavors in this direction on the part of the pupils under my instruction at the New York institution, prompted a series of experiments that resulted in the perfecting of a duplex ear-piece, by means of which two conversational tubes are united, making it practicable for the pupil to hear what is said to him, and also enabling him, in hearing the tones of his own voice, to compare his enunciation with that of his instructor, thereby securing the reproduction of vocal sounds with greater clearness and precision than had before

been possible. The weakness of utterance, however, in many of the cases, where a slight degree of hearing had been discovered, prevented the employment of the conversational tubes already known for voice culture, as their conductive power, when used by the pupil, was found to be insufficient to affect his auditory apparatus. To overcome this defect, I designed the conico-cylindrical tube, which is acknowledged to be the most powerful conductor of the human voice yet perfected. Uniting this tube and the American conical tube by means of the duplex ear-piece, a thoroughly useful and practical instrument has been secured, and the invaluable aid of the ear has thus been brought to assist in the development of the voice. The favorable results attending these efforts to secure an increase of the hearing faculty, so far as relates to the comprehension of spoken language, seem a sufficient warranty for a brief presentation to your consideration of my method of procedure.

Begin by accustoming the ear to interpret the sounds of the short vowels and their modifications combined with the consonants, for the reason that a very large proportion of the syllables in the English language have the short vowel sounds, and, also, because the first efforts required to master the pronunciation of our language are facilitated by a limited number of easy rules.

The class being furnished with the double instrument before described, write a sentence on the large slates, one in which short "a" only is required; for example: "That cat ran at that rat." Placing the ear tubes firmly in the external meatus, speak the sentence slowly, a word at a time, into the bells of the smaller tubes, gathered in a cluster and grasped by the hands of the teacher, while the bells of the larger ones are held by the pupils opposite their mouths, and require each pupil to repeat the words after you, as near as it may be possible for him. Next repeat the entire sentence, and urge the pupil to attempt it in the same way without assistance.

In this connection I would remark that the pupil should be allowed to observe the lips of his teacher, in order that he may the more readily imitate the required sounds. If, however, this watching proves insufficient, his attention should be directed to the proper placing of the vocal organs for the production of such sounds. Do not expect or demand perfection. Approximation is sufficient at first. You will dishearten, discourage, and depress if you criticise too closely. Bear in mind also that the child possessing normal hearing requires years of practice, and that under the most favorable circumstances, to secure correctness of enunciation. Recall the recitations of "Mother Goose" and kindred rhymes by your own little friends; recitations in which scarcely a word would be spoken with sufficient distinctness to be understood by yourself, but which the fond mother and proud father followed with ease and interpreted for your benefit. Should our hearing pupils be treated with less consideration?

Take up, seriatim, the sounds composing the words in the sentence: "Th-a-t (that) k-a-t (cat) r-a-n (ran) a-t (at) th-a-t (that) r-a-t (rat)," combining the aid of both eye and ear. In this way you will do better than "kill two birds with one stone;" you will kill three—lip reading, hearing, and articulation.

As soon as short "a" is mastered, take short "e," as in "pen;" short "i," as in "pin;" short "o," as in "not;" short "u," as in "nut;" and develop them in the same way.

Whenever it happens that the pupils are acquainted with the sounds

of all the letters in any sentence presented to them, they should be required to read that sentence without making the analysis. Such practice will, provided they are conversant with the meaning of what has been written, cause them to make sound and satisfactory progress.

Take up the long vowels in the same manner, and, when you have completed them, you will not only have laid a good foundation, on which can be placed the superstructure without uncertainty as to results, but you will have also increased and quickened the ability to perceive and comprehend sound.

The marked unwillingness of deaf persons to use, outside the classroom or home circle, any instrument that attracts the attention of strangers will, in my opinion, prove the greatest obstacle in the way of securing that culmination which would otherwise be assured by any thorough and systematic course of aural instruction.

MR. GILLESPIE: I have a letter from PROFESSOR DOBYNS, of the Mississippi institution, which I will read:

OFFICE OF THE SUPERINTENDENT OF THE INSTITUTION FOR THE DEAF AND DUMB, }
JACKSON, MISSISSIPPI, July 6, 1886.

MR. J. A. GILLESPIE, *California Institution*:

MY DEAR SIR: I am sorry not to be able to attend the convention, for several reasons, and one is that I might bear a personal testimony to the "aural" work done in our institution during the last few years. I am satisfied that this branch of our work is growing in efficiency as the members of our profession become interested and appreciate it.

During the past year we have given an hour's instruction daily to a class of ten. Five of this number could not, at first, distinguish vowel sounds, but by long and patient practice can readily do so now, and also words and sentences. One pupil, who has been under instruction for ten years, can understand what is said at a distance of two feet without the aid of an ear tube. We find the degree of proficiency of their hearing varies, one day being more acute than another. We attribute this to the state of their health, or, possibly, atmospheric influences.

We have a class of four who are taught altogether *without* signs, and I find the hearing of the four has been much improved during the past year. Those who can hear, or distinguish any sound with the ear trumpet, I intend to practice constantly and, if possible, develop their hearing so they can take their places in the regular "aural class."

Miss McGann, our efficient and successful teacher of articulation, says: "I have taken great interest in the aural class, and am positive it will repay a teacher to undertake this lately discovered but valuable branch of education."

I want to assure you that I regard the aural work of much importance, and I am satisfied that every institution has a sufficient number whose hearing (or ability to distinguish sounds) could be sufficiently improved to make an interesting class.

Hoping you may continue to arouse interest and enthusiasm in this good work, I am,
Yours truly,

J. R. DOBYNS, Superintendent.

MR. GILLESPIE: Prof. Weston Jenkins, of New Jersey, will read a paper by PROFESSOR GORDON, of Washington:

THE COLUMBIA INSTITUTION FOR THE DEAF AND DUMB, }
KENDALL GREEN, NEAR WASHINGTON, D. C., July 6, 1886.

My Dear Professor GILLESPIE:

In this institution a record was made of ninety-six cases tested with the audiometer used by Professor Clark in New York. The full record includes age, cause of deafness, color of eyes, hair, complexion, and audiometer reading for each ear. The following is the summary for the "best" ear:

Doubtful.....	7	Between 25 and 30.....	†5
Below 5.....	5	Between 30 and 35.....	†1
Between 5 and 10.....	4	Between 35 and 50.....	†0
Between 10 and 15.....	25	Between 50 and 55.....	†4
Between 15 and 20.....	*16	At 55.....	†1
Between 20 and 25.....	†5		

* Half of this group of sixteen might be rejected safely at once; the other half would require a long course of systematic exercises to determine the possibilities in each case.

† Certainly possess an utilizable degree of hearing.

As I understand Mr. Denison, the Principal of the Kendall School, has furnished you detailed information concerning the aural work here, it is only necessary for me to reaffirm my conviction as to the inestimable value of this branch of our work to a considerable number of our wards.

A young man leaving college this year is perhaps deserving of mention, as a peculiar case. He became deaf at the age of two and one half years, and was educated in the Illinois institution and the college. By the audiometer the register of the right ear was naught, the left ear seventeen. He could whistle certain tunes with approximate correctness, and imitate whistled sounds; he could also play tunes upon a jewsharp. Experiment indicated that he could often recognize the *repetition* of the same words, and in some cases, elements; but he had no mental perception of speech, through the sensation of hearing. Now, the audiometer record of this young man does not fall far below the "worst" ear of a very deaf gentleman who is a recognized authority upon the sounds of the English language. This gentleman's record is twenty for the right ear and seventeen and one half for the left.

Yours, truly,

J. C. GORDON.

A MEMBER: What is normal hearing.

PROF. F. D. CLARK: There is no such thing as normal hearing. You can draw a complete gradation from the most acute hearing to absolute deafness, and can put your finger at any place in the line, and say this is normal hearing.

A MEMBER: What would your hearing be?

MR. CLARK: Sixty-seven in one year, and seventy-three in another; on that scale. That is a little below the normal hearing, I think.

A MEMBER: I would ask Professor Clark to explain the use of the audiometer.

MR. F. D. CLARK: I am one of the coinventors of the audiometer. The audiometer, as we use it here, is a modification of Hughes' sonometer, or sound measure. We wished to make a perfectly accurate instrument to measure hearing. There has never been such a one made, and this is the nearest approach to it. At the first meeting of the committee appointed by the articulation convention two years ago, my friend Noyes put me on without my consent or knowledge, and I joined it with the express intention in my mind of sitting on my friend from Nebraska, and crushing him out of existence. That was the question that came up; how shall we measure hearing, so that when we talk about it we can say a person hears so much, and know what we are saying. Mr. Bell and I were present at that meeting, but Professor Gordon, the other member of the committee, was not there. And we spent some two or three hours in talking the matter over, and the audiometer was the result. It consists, first of an ordinary Symondy's electro-magnetic machine; the armature so arranged that in each revolution it makes, it breaks the electrical current a great many times. You are aware that every time the electrical current is broken which passes through a telephone, the Bell receiver of the telephone, it produces a tick in that telephone, and that when the breaks are very rapid they coalesce into a sound. There is also another law of electricity that when two coils of wire are near each other, and the current is made in one, it produces a current in the opposite direction, in the other. There is another law, that, as those coils are separated that the produced or induced current becomes weaker and weaker until you reach a distance at which it is practically nothing.

We worked upon those facts, and have the instrument. It is a long box in which there are two coils, one fastened at one end of the box, and the other moves along a scale. When these coils are placed *together* and a person speaks into the box, the noise is so intense that I *can hardly hold it close* to my ear without its deafening me. As we

move it away the sound becomes less and less until, as I stated a little while ago, at sixty-seven and one half I lost it one ear, and was able to hear it at seventy-two in the other, in a silent room. I would lose it much before that in a room where there was some noise. Professor Melville Bell, the old gentleman, is able, not only to hear at eighty-seven but says he can hear it much further, which, perhaps, will account for the wonderful way in which he has been able to analyze sound. At ten is about the point where I can bear to hold the telephone closely against my ear, and catch all of the sound. Some fail there, and so on down. Many persons can go about fifty-five. This table here is Dr. Gordon's test at Kendall Green. In New York it was about the same way. I have made fourteen hundred tests in the last year; that is, tests with fourteen hundred different people. That includes the tests made last year in the New York institution, also in New Jersey, and Illinois, and all of the deaf-mutes that I could get in and around New York, and those that I had in Arkansas.

MR. GILLESPIE: Will you give us your opinion of this matter before you made your tests?

MR. CLARK: I was absent when the committee was appointed. When Professor Noyes suggested my name I think I told him that I did not want to serve. But he told me that I had to, and I thought I would. I went in there as a skeptic. I do not think you can find in the whole profession to-day a more thorough and ardent believer in aural teaching than I am. [Applause.] I was perfectly astonished. I became so interested in it that night after night I went to the New York institution after dark, waiting until the boys and girls had got through their studies; got those boys into the class or study-room, and tested their hearing with two or three different sets of tests. Mr. Currier assisted me very greatly in that work. I am also indebted to him for many very valuable hints, especially for what I consider one of the most valuable, and that is this method of gathering all of the tubes of the class into one or two hands, putting the tube that leads to the deafest ear in the best position in front of the mouth, and grouping those that can hear better around it, and talking right into the whole thing, and letting them all hear at one time. That is his idea. He gave me that suggestion, and I have used it since, and it is a very valuable one. Perhaps some other teachers may have discovered it independently, but Mr. Currier taught me.

I did not do any aural teaching, except in my own class, during articulation hour in New York. Mr. Currier had the pick of the institution in his aural training. But in one class in New York, a class that, as far as I can remember, certainly were not picked out for their hearing, a regular class of girls in the institution, it seemed to me as though they all could hear. The first five or six girls we picked out one after another, seemed to hear right through the tube, and to hear to a great extent. We would say "oh," and they would say "oh;" we would say "ah," and they would say "ah." Then we would try them on sentences. I would say, "Are you a bad girl?" They would not get that, but they would give me a sound of voice that showed they certainly heard it. Any one that did not believe that some of those girls heard would not believe that any one heard. We had nearly four hundred cases in the New York institution, and Professor Gordon had less than one hundred. The percentage at the Illinois institution was larger than this. The percentage at the New Jersey

institution was a trifle smaller than this. In Arkansas, which is also a part of the total, the average is larger; but it is small here, so that you may take that as a fair average. I have not yet worked up a complete percentage of all the tests that I have made, as I have been very busy during the last year. We have been building and reorganizing our school, and I have been ashamed of myself for the way in which I have treated this aural training. I have not done what I hope I will be able to do next year, by a great deal. But we have had some most wonderful results in Arkansas. I had a boy come into my office one day and come up to me, and said "my fa," and then he would go on again in that way. I listened just as intently as I could, but could not make out a word he said. He had been in school the year before, and had been taught by signs for the whole year; and the result was that he knew his letters up to "f," but was not very sure about "f." That is all that he knew. His father wrote to me that he could hear some, but that it did not seem to do him any good. He said that they could holloa at him, and that he thought he knew his own name, and they thought he could pick that out from other signs, but that the only words he knew so as to be understood were "pa," "ma," "my," "brother," and "pony." I tried him upon "pony," and he said "po." We took that boy, and the first trouble we had with him was when we said anything to him through the trumpet, to keep him from starting in and uttering these words for five or ten minutes. We had hard work to teach him that he had to hold up; that we did not want him to say any more than we said to him. He would jabber right along. We worked with that boy all this time, and just before I left Arkansas, we had a cook in our kitchen who had just come there, and knew no signs at all, and his assistant was taken suddenly sick Saturday morning, and I called to this boy and said to him, "Albert, don't you want to make fifty cents to-day?" He always wanted to make fifty cents. I said, "Go into the kitchen and help the cook, and I will pay you fifty cents to-night." I did not say anything to the cook about it, except that I told him he would have to speak loud to the boy. At night I went there and said, "Well, does the boy understand you? how did you get along with him?" "Well," he said, "some things I would say to him he would seem to understand just as good as anybody. Some things he would repeat after me—he did not seem to understand." You all know what that was; the cook had gone outside of the boy's vocabulary. And while he could imitate the sounds, he had no idea of what was being said to him. That is one case. That boy is on the records of the institution as congenitally partially deaf.

We have another case that is put on the records of the institution as "totally deaf," but he has a good deal of hearing. He has been taught through the tubes, and has acquired considerable development. He is a semi-mute; lost his hearing at four years old from cerebro-spinal meningitis. My Board of Directors come up there and go into the shoe shop, and they ask that boy questions and talk with him just as you would talk to Professor Porter, and with the same ease. He knows almost all of the words, and we have no trouble in extending his vocabulary. I never knew him to fail to get a word, and he really seems to me to be only hard of hearing. He does not speak as plainly as I would like to have him.

Those two boys are friends, and are together all of the time, going around and talking to each other through their tubes. They do not

make signs to each other. When they meet other boys they make signs. The younger one does not know signs very well. I can go into the shop and say to either one of them, "Where is the last pair of shoes you made?" He would bring them to me just as quickly as any speaking boy. I can tell him, "Go down and open the gate and let this gentleman go out, and close it after him," and he will do it. I talk with them in the ordinary tone of voice, six or eight feet off. Six feet away I can talk to them in a common, ordinary tone of voice, and he will understand everything I say.

I would say about these audiometer tests, that I do not think they are at all essential. You can do the same thing in your own institution with a speaking tube. If you have an audiometer, you can make the test a little quicker, and get an idea of the extent of deafness a little sooner. In making audiometer tests we should always keep a record of them. We should keep a record of tests made in both ways. A piece of stiff cardboard is just as good as any audiphone that you pay ten dollars for, as long as it lasts; and a piece of hard millboard will last about as long, and be good until it is used up.

Now, about the audiphone. I have found, although I was an unbeliever in it, that about one in a hundred of the deaf-mutes who do not hear with a trumpet, and who are very deaf to the audiometer, will hear with an audiphone in a degree that will perfectly astonish you. But there is no more than that. It seems to me that it either helps them a great deal, or it is of no use.

We have a record of the name and age of each of the pupils upon whom these tests were made; of record, also, as to the color of their eyes, color of their hair, etc. About one in a hundred we find that the audiphone does help.

MR. HAMMOND: What particular bearing have the color of the eyes and hair here?

MR. CLARK: That was noted at Professor Bell's request. He desired to see if we could find any law in it. I was working in a committee with him, and that was done at his request. As to the aids to hearing that we use, my private opinion is that "The American Conico-cylindrical" tube is the instrument that we must work with in a very large majority of cases. This is a tube made by every instrument maker, as it has been for the last twenty-five years, a tube which tapers down towards the point, and is not the same size all the way. I have tried some very large tubes. I do not state this as my conviction, but as my very strong opinion, that if you get a tube that is larger than ordinary, as soon as you begin to increase the size, what you gain in loudness, you lose in distinctness. You may make your pupils hear with it, but you will never be able to teach them to distinguish what they hear. They simply hear a confusion of noises. The size commonly in use seems to be the nearest perfect.

I must say that I look upon the double tube as simply a nuisance. It is not as powerful as the single tube.

Dr. Sexton, of New York, a man of national reputation, has a tube that is double at both ends, having two mouth-pieces, and two ear-pieces, one for each ear. The ear-pieces stay there by themselves, by pressure which you can regulate. But I cannot say, conscientiously, that I ever saw any particular benefit from it. If there is any, I do not think it is enough to pay for the added machinery and cost. I can buy a double tube for ten dollars, furnished at twenty-five per cent discount to institutions, and I can buy two tubes with a separat

ear-piece for the same price, and I much prefer them. If gentlemen wish to experiment, they are welcome to spend ten dollars. But I have got through experimenting with double tubes. I only spend my money for single tubes hereafter.

MR. HAMMOND: I supposed that the advantage of the double tubes was that the scholar could hear his own voice.

MR. CLARK: The children will leave it in the school-room every time. Some teachers may differ with me about their relative value and usefulness, but I simply give you the result of my experience.

I have used a little different method from that explained by Mr. Currier in his letter. I have found in my experience that the long vowel, or those vowels which can be prolonged, as "oo," "aa," "ee," seem to be recognized by the deaf when the short vowels are not. So I teach those first, though there is no objection, that I know of, to teaching the others first.

I agree with Mr. Currier exactly in the usefulness of the drill of allowing the pupils to look at the lips and hear through the tube at the same time when you are speaking to them. In fact, in teaching the deaf I have always made it a rule, if I can teach a boy anything in one way easily, and it is hard to teach him in another way, I take the easier way every time, if it teaches him as well.

If I can take a boy who is hard of hearing, but who reads the lips well and accurately, and teach him to recognize the sound of a trumpet easier than by taking a new start, I like to do it. However, there are some cases where they read the lips with so much ease, that it is necessary to conceal the lips from the pupil. And I want to say to all teachers, that when they conceal the lips they must also conceal the whole face, for deaf-mutes sometimes read wonderfully well when the lips are covered up. I sometimes stand behind the pupil, so that he cannot see me. I sometimes put the tube under my arm and turn my head completely away from him. The teaching of our aural class has been done entirely by Miss Kirkham, my articulation teacher; and I have had but very little to do with her, beyond giving her my advice. We have two boys whom we teach through the ear entirely. I have frequently asked them to spell a word for me, and they spell it, naming the letters in the old-fashioned way. They never have had any elementary drill in articulation. They have been taught articulation, but not by elements. And I do not think that I am doing them any harm, as I intend to teach them from this time until they or I leave that institution in the way in which they are taught now. There are several others there whom I have no doubt at the end of next year will be as proficient as these two were at the end of this year.

There is no doubt in my mind that as a result of this training the hearing improves. I have heard many theories for it, and have heard it explained in a great many different ways. Physicians and otologists are very unwilling to admit that the hearing of deaf persons improves. They say, for instance, "there is a local tract in the brain which receives impressions from the ear, and in children of defective hearing that tract has lain dormant so long that it does not respond to impressions; and if you make an impression upon it, and continue to make that impression for some time, after awhile that tract in the brain will respond more easily than it did at first; but the child does not hear any better." They always put that last qualification in. It

seems to me that is simply another way of stating that the hearing does improve.

Take the tests made by the audiometer in the New York institution in December, showing a certain range of hearing, and then the tests made in the May following in the same children, and those who had received aural teaching from five to ten minutes each day there was an improvement in one ear or the other, and in most cases there was a very decided improvement, while in those with whom the audiometer had not been used there was no improvement. It will also be remarked that in the cases where the audiometer was only used in one ear that the improvement was confined to that ear. [Great applause.]

MR. GILLESPIE: We have another convert we would like to hear from—Miss Selby, of the Illinois institution.

MISS SELBY: When Dr. Gillett introduced me to my new class-room last year, he said, "We will begin this work as if we had all faith in it." I think I never undertook any work in which I had less faith than in that. Now I am convinced by the success of my labors. Dr. Gillett has given me every help that could be given, and all of the instruments that have been manufactured for the deaf have been purchased for me, and where they have not been made he has invented them. The instrument which has been the most help to me is the tube. I like the duplex tube. In using that I find that the pupil can give back to me my own words very much more readily and accurately than when I use the single tube. The inventive genius that Mr. Gillespie was sighing for has already been found. Dr. Gillett invented such an instrument in the first part of last year, and I use no other now. I can speak with that instrument to four pupils quite as easily as I could to one before.

I began with my class by giving them the full sounds, but I found after awhile that I could begin just as easily by giving them words, and now I usually begin with words. I have this instrument, which Dr. Gillett calls a "devil fish," which has one mouth-piece and four ear-pieces, and the sound of the words is heard by the pupils at once, who give it back to me. Each pupil gives the word back to me and then gives it to his classmate. And in this way, after their vocabulary is extended, we have some little conversation. I have thirty pupils in my class, one third of whom, with the use of the instruments and aids to the hearing, are placed on a plane with hearing children. I have no question about it at all. There are two pupils who began a short time before Christmas in my class, and who could then say "papa," "mamma," "cow." Now they can converse with any one in words of one or two syllables, and understand what you say and can reply.

MR. NOYES: Have you any pupils that are taught exclusively by the aural method?

MISS SELBY: No, sir. We have one hour a day in classes of four or six.

MR. NOYES [to Mr. Gillespie]: How many have you taught exclusively by the aural method?

MR. GILLESPIE: Twelve.

MR. F. D. CLARK: I have only taught two exclusively in that way; the others go to the class for an hour.

DR. GILLETT: Some of Miss Selby's pupils, when they go to their classes, are communicated with mostly by oral speech, and receive their communications from their teacher by hearing. I have in mind

a lady whom I had silver tubes made for, which fit within the external ear and penetrate the auditory meatus, and she is able to converse with great improvement in her speech.

MR. WESTON JENKINS: My observation in New Jersey with the pupils of the school of which I am the head has convinced me that there are a number of my pupils who are only hard of hearing, and that hardness of hearing, when congenital, unless aural methods are used, involves all of the consequences summed up under the head of deaf-muteism; in short, makes the subject a perfect deaf-mute. I will ask Dr. Peet how Miss Frankie Horton is getting on? That is the young lady who was under my instruction when I was working for Dr. Peet. She was a remarkably good articulator and lip reader, but the possession on her part of any degree of hearing which could be made useful was not suspected by herself or her teacher or any of her friends.

DR. PEET: That young lady's lip reading is so perfect that it is possible for any person to converse with her upon any subject. And since she has received special instruction in regard to hearing, there has been a little development of appreciation of vocal sounds. So that she can, very much more than formerly, comprehend what is said to her through the ear trumpet alone, even when she does not see the lips.

DR. GILLET: As we all know, the ear is a very complicated organ, a perfect instrument, so to speak. Musicians tell accurately when a piano is in perfect tune, by striking a particular note upon it, when the same note upon a violin or another piano will respond to it. Otologists tell us that in the top of the ear there are certain minute, almost innumerable papillæ. Certain of these papillæ respond to notes of a certain pitch, and do not respond to the notes of any other pitch; so that with one part of the ear we hear sounds that we designate as having a high pitch, and with another part of the ear we hear sounds that we designate as of a low pitch, and with others running through the scale intermediately. If those papillæ that respond to tones of a high pitch are paralyzed, which is sometimes the case, then the person, while he may hear the other tones very well, will hear nothing in that pitch. But if those are in a normal condition, and the papillæ which correspond to notes of a low pitch are paralyzed, then he hears no tones of a low pitch. So a person may hear some speech that is spoken in a particular pitch of voice, and nothing else; and he will never guess the reason of it. I think that is a subject that is very well worthy of our attention. I have in my mind two sisters, both of them semi-deaf. One will hear the telephone bell quite distinctly, and the other one will not. The other one will hear a pitch that is very low, which the first one does not hear at all. And yet there is one fact that is peculiar in reference to those two ladies, that in the street car they will hear better than anybody else, on all pitches.

MR. GILLESPIE: That same fact is spoken of by Miss Plum, in her experience in her class—that some of the children understand high tones and some low. And that is the philosophy of it.

MR. ELMENDORF: I will add one more word to Dr. Gillett's remarks. A little girl that I have been teaching for two or three years last past, I have discovered can hear certain sounds; but at just what pitch I never discovered until some time just before Christmas, when, as I was playing on the piano, and she was standing with her hand upon it, she said "*I hear.*" I tried to find what she did hear; and I struck

the different notes until I struck B flat, which was the note she heard. I then took my tuning-fork, and found that that was the true sharp A on the concert pitch. I then took up a violin and tuned a string of the violin to that exact pitch, as near as I could judge, and she heard that. I had no other mechanical instrument. This simply showed that the peculiar construction of her ear was adjusted to that peculiar form of vibration, simply carrying out Dr. Gillett's idea.

MR. WESTON JENKINS: I would like to ask Mr. Wing if he will state the peculiarity of his own auditory apparatus?

MR. WING: I have found out that I can hear in the right ear only sharp sounds. On a piano I can hear the thud of the keys up to a certain point, and then it changes. With my left ear I can hear bell sounds only. Sleigh bells sound as if inclosed in a wooden box. I have discovered that there are some notes on the piano that I can hear very plainly, and others not at all. And there is a marked difference in the sounds of a piano heard by a trumpet and with a stick in my teeth. I presume that one fourth of the deaf and dumb can hear as well as I can. My hearing changes. Some days it is very clear and others very dull. Then again there are some days I can hear certain sounds, and perhaps the next day I cannot hear them. So that my hearing is not to be relied upon.

One thing more I would remark in connection with the use of my single tube. When persons hold it in a certain way the sounds are greatly confused. If held in another way the sound is very clear.

MR. MATHIESON: We had in our institution a girl who was sent to us from away back in the country, and she was certified to us as deaf and dumb. She was certainly a dull pupil, and she could not talk or hear. After she had been with us probably a month, very suddenly her hearing developed and she could hear as well as I could. I made this discovery by the application of a little soap and water. [Laughter.]

DR. E. M. GALLAUDET: I do not know that I have anything to add. I may say that while my own hearing is considered very good in regard to most sounds, that I am deaf to certain sounds. There are certain delicate metallic sounds that I fail to hear unless they are very near to my ear. By the ordinary tests of an aurist, or the ticking of a watch, I should be pronounced a pretty deaf man. But in all matters of speech and vocal sounds, my hearing is considered normal.

I may say that I am very heartily in favor of aural instruction of those who have some hearing. In Washington we have endeavored to do what we could, and the results have been highly satisfactory. We have quite a number of very interesting cases there. I think it is a branch of instruction which should be attended to for the deaf.

MR. HAMMOND: We have several cases in the Iowa institution that we have been teaching both orally and aurally, principally for the last year, and they have made a good deal of advancement. They were getting to use language quite well at the close of the term, whereas at the opening of the term, though they had some language and hearing, they were unable to utilize the hearing that they had.

MR. WALKER: We have a few in Kansas whom we are trying to teach to hear by the aural method. We find a difficulty though in getting teachers enough to supply the different departments. We can only send the pupils a short time three or four times a week to that teaching. I feel encouraged, however, and hope that we shall succeed.

I shall endeavor this year to do more in the work. I believe, as all do, that there are a great many who can be benefited by these tubes, and have their hearing developed sufficiently to aid them in gaining an education in the construction of English sentences.

MR. DENISON: I am in very much the same situation as Mr. Wing in hearing. I use an ear-piece; and would advise others who may follow my example in using one not to be discouraged if they find that sometimes they get no advantage from it. Last winter I found myself unable to hear with my ear-tube for two days; and I was very much depressed in consequence. But my little boy told me that he had dropped a marble into it. [Laughter.]

MR. WESTERVELT: I had my trumpet that I was testing the class with, and found that none of them could hear at all. Then I tested some pupils that had formerly heard fairly well with theirs; and, finding that they could not hear at all, I investigated the trumpet and I found that it was imperfect; that it was filled with japan. But we have been using our trumpets in our classes for the past year, and with some pupils for the past three years. We have a number of pupils who hear more or less perfectly; but none whom we teach altogether through hearing, however. But the hearing is made to help them in their articulation exercises. The teachers are each provided with more than one ear trumpet, so that the pupils can use a trumpet; and they are requested to use it when they are receiving special instruction in speech.

THE CHAIRMAN: The discussion of the subject of Advanced Language will be indefinitely postponed. The papers that have been prepared in connection with this subject will be published in connection with the proceedings of the Normal Department. We have a poem that has been prepared by Mrs. Isaac Louis Peet, with reference to our gathering here. Previous to its reading it is desired that Dr. Gillett come forward and occupy the chair.

President P. G. Gillett thereupon took the chair, amid great applause.

The following poem was then read by MR. WILKINSON, and interpreted by DR. PEET:

THE EAST AND THE WEST.

We take thy hand, O fair young West,
We clasp it close as here we stand;
Our old traditions of the East
Grow misty in this wondrous land.
And looking in the radiant eyes,
Our hearts beat high with glad surprise!

Tired Pilgrims over desert wastes,
'Neath burning suns we come to thee;
But as the mountain torrent hastes
Through lone, dark cañons to the sea,
So here with hurrying step we came,
To seek thine aid, behold thy fame.

The frowning Rockies, as we passed,
Bent o'er us their protecting hand;
The sad Sierras seemed to smile
Across on this thrice favored land,
To where, amid thy endless flowers,
Shall love and rest awhile be ours.

O golden land! O hearts of gold!
How often in our dreams
We saw thy mountains, pressed thy hand,
And walked beside thy streams;
But dreams are dim and visions naught,
Beside the glory thou hast wrought.

We brought to thee of all our best;
 Thou gavest unto us thine own;
 And interchange of thought and hope
 Have given a clearer, deeper tone
 To Duty's voice, to Toll's command;
 And firmer, surer we stand.

We stand together, West and East,
 One hope, one work, one aim.
 And bright for us, or far or near,
 Shall burn the tender flame
 Of memories of this union sweet,
 To make our labor more complete.

Then once again with fond regret
 We clasp in ours thy hand,
 And look farewell with misty eyes
 O'er this enchanted land,
 To where thy mountains grand in state
 Keep guard around thy Golden Gate.

[Great applause.]

President Gillett was here presented with a silver set, with the following address, which was received with long continued applause:

REMARKS BY GEORGE E. SKINNER.

Doctor Gillett: I have the pleasure, sir, as one of the committee appointed by the delegates to this convention en route from the East, to express to you their appreciation of your services in making the journey to this place so comfortable and delightful.

Your arduous labors extended to every State in the Union and Canada. The anxiety and requisite toil experienced by you without remuneration or complaint, has placed us under great and lasting obligations.

As the result of your efforts, I venture the assertion that no excursion has ever crossed the continent better equipped and with greater pleasure and satisfaction. And allow me to remark that a more intelligent, faithful, and worthy company of instructors cannot assemble at any point, east or west, than those you so successfully brought to this beautiful spot in the Golden West.

Your efforts have been the means of calling together a much larger number than would otherwise have participated in the pleasant and instructive exercises of this convention, and will cement more closely that bond of sympathy for the work in which Superintendent and teachers are engaged, and by comparison of views resulting from your experience, all will return to their respective homes with a greater desire to perform more efficiently, if possible, that glorious work of ameliorating the condition of the deaf and dumb of our country.

We ask you, doctor, to accept from your friends this case of silver as a slight expression of our appreciation of your effort in our behalf, with the desire that you may long be spared to continue in the glorious work to which your life has been consecrated. In your declining years, when relieved from active duties, and memory shall recall the many pleasant incidents of a long and useful life, may this occasion be one on which you may dwell with as delightful emotions as are enjoyed by those who are permitted at this time to express their gratitude to you.

DR. GILLETT: My friends, I confess I do not know what to say. The field is a large one, but I do not feel that I am competent to respond without some opportunity of reflection. I was appealed to

once by some friends and neighbors, who called to see me to know if I could not do something to get one Creed Larch out of the penitentiary; and the reason assigned was that his family were a very troublesome family in the community, and they thought if they could get Creed home and out of the penitentiary, that perhaps he might take care of his troublesome children. I did what I could. The matter went to the Governor, and it was not long afterwards when I met Creed coming down the street, and he said, "Doctor, I am very much glad to see you; you got me out, and I will return the compliment one of these days." [Laughter.] I hope that some time I may be able to return the compliment, for I assure you, my friends, that I have no sense of deserving any such recognition of my humble services in your behalf. I did only what I was appointed to do, and others did what they were appointed to do.

I may take occasion here to say that the assembling of such a body of men and women as this is one of the notable events, not only in our lifetime, but in our generation. There has never been a time in the history of the world when a similar body could have been brought together. Take the character of this body that is represented here this evening—the most powerful exponent of the enlightened Christian sentiment and fellowship of this age that can be found anywhere.

Has it occurred to you, as Dr. Gallaudet remarked to me on yesterday, that the education of the deaf was the first enterprise for the care of the afflicted and unfortunate? It was first begun by our forefathers in the early part of this century as a benevolent enterprise. The old American Asylum at Hartford is the mother, not only of all of the deaf-mute institutions of this land, but it is the mother of all insane hospitals, all of the institutions for the blind, of all institutions for the feeble-minded, of all the reformed schools, and of nearly all those institutions, educational and charitable, that now characterize this age of ours. [Applause.]

I have no hesitation in saying that nowhere else on all this globe can such a powerful and forcible exponent of the Christian and enlightened sentiment of this age be found as are brought together here this evening.

Then I consider this gathering in another aspect. I was talking with a gentleman last night who told me that he crossed that terrible desert coming to this country, when he could have gone from one side of it to the other, stepping from the dead body of one animal to another all the way across. He had known what it was to traverse the desert on foot making his way during the nights to escape the savages. And he is still a young man. We came here in elegant palace cars. We came here with the best comforts of a home that this world affords. We came not merely in days; but we could count it in hours. Put this alongside of that, and who says he is not proud to say that he is an American citizen, and that he lives in this nineteenth century? My friends, it is not for us to enjoy alone; it is also for us to achieve. We know not what the vast opportunities are that are lying before us, and what achievements may yet be awaiting us, and how wisely and well we may lay the foundations for those who follow us to build upon. God forbid that we should fritter away our lives; that it shall be said in the future of us that we would never have been where we are but for our fathers years before. May we act well the part that God has intrusted to us; and may we ever be found faithful to all the trusts that our fellow men repose in us.

I thank you sincerely for these marks of your confidence and favor. You have been a thousand times kinder to me than I have deserved. I have never had a greater pleasure in all my life, my friends, than in trying to do as best I might what would contribute to your pleasure and happiness, in making this journey. And may God grant that our journey through life, as we travel over the deserts of life, as we cross the mountains, as we pass by the rivers, and as we go over the plains, and as we are finally landed in the Paradise beyond, may God grant that our lives may be peaceable, pleasant, and happy. [Great applause.]

HON. ERASTUS BROOKS: Mr. President, ladies and gentlemen, I think to add words to those we have heard to-night, and aforetime at this convention, would be almost like gilding refined gold, or seeking to add perfume to the violet. I have been deeply impressed with this convention. I have attended a great many assemblies in my life, and for attention to business, and for instruction in every department which belongs to the several institutions of which we are members, for fidelity to the cause and causes which have brought us together, and for great respect for the past which has led us to the present, and which gives prospect of a brighter future than the present or the past can afford, it seems to me, as my friend has intimated, that there has been no parallel to this assembly in the conventions of the country. The great order which has been observed, the respect and the fidelity for the interests which we represent, the peace and good will which has animated every heart and has been diffused to all around us, it seems to me make it a memorable event in our own personal lives, in the associations which we have formed for the present, and in the memories which can never fade away.

It will not be my privilege to be present at the close of this convention to-morrow night. I shall therefore ask the privilege of expressing what I sincerely feel, the warmest gratitude, not only to our friend, your presiding officer, who has led us thus far in safety and in comfort, but to our near and dear friends, whose home we have visited, and who has extended to us such a warm and cordial welcome. [Great applause.]

Speaking for myself—and I am sure I speak the common sentiment of you all—the visit we have made is to us a new revelation of our country which God seems to have blessed and favored above all the nations of the earth, in that unity of spirit, which, more through education than from any other cause, binds the brains and the hearts of men in a closeness and unity of feeling, and which no power on earth can possibly separate in the future.

"Count that day lost, whose low descending sun
Sees at thy hand no worthy action done."

In that spirit, I say, we may take each other's hands, and feel bound closer and closer together, each heart in thankfulness to God for the privileges we have been permitted to enjoy during the past week, and during our journey to this very distant place from our respective homes.

I am especially thankful that I have come to see, eye to eye, and face to face, this Golden Gate of the Pacific—the dreamland of my imagination—of which I have heard and read, and now, in common with all of you, enjoy. And as I looked out upon it yesterday, in the clear sunlight, *with the clouds resting upon the sides of the hills,* &

the sun of heaven resting upon their tops, I was led to feel and exclaim in regard to the educational institutions of the country, and especially in regard to its commerce:

" Bid harbors open, and public ways extend;
Bid temples worthy of the gods ascend."

We have seen this, and we have enjoyed it in presence. I think I understand, Mr. Chairman, as never before in the history of my own life, and in the history of the country at large, what the poet said when he put that important question:

" What constitutes a State?
Not high-raised battlement, or labored mound,
Thick wall, or moated gate;
Not cities proud, with spires and turrets crowned;
Not bays, and broad, armed ports,
Where, laughing at the storm, rich navies ride;
Not starred and spangled courts,
Where low-browed baseness wafts perfume to pride.
No;—men, high-minded men,
With powers as far above dull brutes imbued,
In forest, brake, or den,
As beasts excel cold rocks and brambles rude;
Men who their duties know,
But know their rights, and knowing dare maintain."

And for this revelation of what nature is in the grand mountains and rivers which we have passed; this revelation of our common motherhood, in the sympathies felt one for another, and for our dear friends who have given us of their hearts and their homes, I am sure we feel a thankfulness which will continue in our memories to the latest day of our lives. [Applause.]

THE CHAIRMAN here announced that the colored waiters would give a musical entertainment, after which the convention adjourned until the following day, at seven o'clock P. M.

THURSDAY, JULY 22, 1886.

EVENING SESSION.

MR. THEODORE LORD delivered to the convention a lecture on the Samoan Islands, after which the convention proceeded as follows:

THE CHAIRMAN (DR. GILLET): Ladies and gentlemen, members of the convention, we have arrived, all too soon, at that time that we have all been looking forward to with dread. It seems almost impossible that already a week and a little more has passed by since we arrived at this most beautiful and most hospitable place; which has been to us indeed a home; where we have felt the freedom of home, where we have taken the liberties of home, and where we have had the comforts of home. But we cannot tarry longer. Duty calls us to other fields of labor.

This convention has been indeed a very green and a very bright spot in the professional history, and in the life of every one of us.

Here old attachments have been strengthened; here new acquaintances have been formed; here friendships have been contracted that

neither time nor eternity will efface. And we shall, all of us, as long as we live, look back upon it with feelings of the most intense satisfaction and pleasure, and with the feeling that it has been a high honor to have been a member of this convention; to have met the people of this lovely town, and of this enterprising community; and to have enjoyed the hospitality of the Superintendent of this institution and his lady, and of his assistants, and of the Trustees of the State; and to have received, as we did, the welcome of his Excellency the Governor, the Chief Executive of the great State of California. We would gladly tarry longer; but we cannot. We shall not all be assembled again; and it will be with feelings of no slight degree of sadness that we shall to-night take the hand of each other to say good-bye, knowing that that is only the feeble symbol of the fact that we shall all meet in the great morning beyond.

There are duties that devolve upon us upon this closing occasion, and I will not occupy your time further, but will give way for the business that properly comes before us at this time. [Applause.]

Prof. J. L. Noyes, Mr. Mathieson, Mr. Dudley, Mr. Gillespie, Mr. Walker, Mr. Clark, Mr. Argo, Mr. Crouter, and others then read the following resolutions:

By MR. NOYES:

Resolved, That the grateful thanks of this convention be extended to the following named railroad companies that have combined to make most pleasant, profitable, and memorable the long journey over hill and dale, over dust and fruitful field, necessary to reach the Pacific Coast and be conveyed back to our respective homes, viz.: Chicago and Alton Railroad; Union Pacific Railroad; Denver and Rio Grande Railroad; Central Pacific Railroad; Southern Pacific Railroad; Oregon Railroad and Navigation Company; Northern Pacific Railroad; Chicago and Northwestern Railroad; Chicago, Milwaukee, and St. Paul Railroad; Wisconsin Central Railroad; Chicago, Minneapolis, and St. Paul Railroad; Chicago, Burlington, and Quincy, and Chicago and Rock Island Railroad; Illinois Central Railroad; Louisville and Nashville Railroad; Baltimore and Ohio Railroad; Pennsylvania Central Railroad; Boston and Albany Railroad; Grand Trunk Railroad of Canada; Chicago and Grand Trunk Railroad; Michigan Central Railroad; Lake Shore and Michigan Southern Railroad; New York Central Railroad; Cincinnati, Indianapolis, and St. Louis Railroad; Queen and Crescent Railroad; East Tennessee, Virginia, and Georgia Railroad; Missouri Pacific Railroad.

By MR. MATHIESON:

Resolved, That the grateful thanks of this convention are hereby expressed to the following associations, viz.: The Transcontinental Railroad Association, the Missouri River Railroad Association, the Michigan Railroad Association, the Trunk Line Association, the Central Passenger Commission, the Southern Passenger Commission, for the liberal concessions made to us through the Chairman of our Transportation Committee, rendering possible a large attendance upon the Pacific Coast convention.

By MR. DUDLEY:

Resolved, That the thanks of this convention be extended to the Pullman Palace Car Company for the elegant service rendered its members, and especially for the use of their coaches during our two days' stay at Jacksonville, Illinois, and four days' stay at Colorado Springs, and for the pleasing and courteous attention so cheerfully bestowed by officials en route.

By MR. WALKER:

Resolved, That this convention holds pleasant memories of their short stay at Colorado Springs, as guests of the Colorado Institution for the Education of the Deaf and Dumb, and of the grand and magnificent scenery its members were permitted to enjoy for a season.

Resolved, further, That this convention hereby extend their most cordial thanks for kind hospitalities extended them by Superintendent D. C. Dudley and wife, and the honorable Board of Trustees of the Colorado institution.

By Mr. J. A. GILLESPIE:

Resolved, That the thanks of this convention are hereby tendered to Mr. H. C. Hammond, Secretary of the convention, and to his assistants, for a full and accurate record of our proceedings.

By Mr. F. D. CLARK:

Resolved, That the thanks of the convention are extended to the proprietors of the hotels in Chicago, Colorado Springs, and Salt Lake, and to the eating houses en route for hospitalities and concessions made to the members.

By Mr. ARGO:

Resolved, That the thanks of the convention be tendered to the representatives of the San Francisco and Oakland press for the full and interesting daily reports of our proceedings, and also to Mr. E. S. Belden for the careful stenographic report of the entire proceedings of the convention.

By Mr. W. O. CONNER, of Georgia:

Feeling that the gentleman who was called upon to preside over the deliberations of this convention, has conferred honor upon it, by the able, impartial, and affable manner in which he, with his assistants, dispatched its business, and that we should not let the occasion pass without a full and hearty expression of our appreciation of the services rendered; therefore,

Resolved, That the thanks of the convention be tendered to its able President and his assistants, for the satisfactory manner in which they have intelligently and impartially discharged their duties.

By Mr. CROUTER:

Resolved, That the thanks of this convention be extended to Mr. Charles W. Ely, of Maryland, and the Executive Committee of the convention, for inaugurating and conducting to a most successful end the Normal Department of the convention; and

Resolved, further, That this department be continued at future conventions, in such manner as the wisdom of the Executive Committee may suggest.

By Mr. HOTCHKISS:

Resolved, That the thanks of this convention be hereby tendered to the Board of Directors of the Illinois Institution for the Deaf and Dumb, for their generous hospitality in entertaining the members of the convention during July third and fourth, and to the Superintendent, Mr. Philip G. Gillett, and to Mrs. Gillett, and Mr. Charles P. Gillett, and their assistants, by whom that hospitality was dispensed, for their successful endeavors to make the visit one of the pleasantest episodes of the whole meeting.

The following resolution was adopted by the deaf delegates to the Eleventh Convention of American Instructors of the Deaf:

WHEREAS, The several Superintendents and teachers have so kindly volunteered their services as interpreters in behalf of the deaf portion of the convention, during its long and interesting session; be it

Resolved, That our heartfelt thanks be tendered them, one and all.

DOUGLAS TILDEN,
JNO. B. HOTCHKISS,
GEO. WING,
JULIA A. FOLEY,
DOSIA A. GRIMMETT,
Committee.

DR. E. M. GALLAUDET: I have been requested by my brother, the Rev. Dr. Thomas Gallaudet, of New York, who has been prevented by circumstances beyond his control from being present this evening, to express on behalf of himself and his fellow laborers in the New

York Institution for Deaf Mutes their great appreciation for hospitality and courtesy which has been extended to them by the officers of this institution, and by the officers and members of the convention in which they have been permitted to join as members.

My brother begged me to assure the convention that his absence was occasioned by circumstances beyond his control, and that he would have taken especial pleasure in presenting this assurance of his regard and appreciation.

I beg leave also to present a preliminary resolution, which I will read. But I may premise, Mr. President, by saying, that though they necessarily for the purposes of the record assume a certain formal garb, yet I am sure that they represent feelings existing in all our hearts which will overstep and go beyond the bounds of mere formal expression:

WHEREAS, Through the unbounded hospitality of the Board of Directors of the California Institution for the Deaf and Dumb and the Blind, and the foresight, energy, able management, unfailing courtesy, and cheerfulness of the officers intrusted with its dispensation, the Eleventh Convention of the Instructors of the Deaf to-day closes its sessions with the consciousness that this has been in every way the most profitable and the pleasantest of all these gatherings; therefore, be it

Resolved, That the thanks of this convention, individually and collectively, and, through them, of that vast body who will profit by the many lessons learned here, are due and are hereby tendered to the Board of Directors of this institution, to its Principal, Mr. Warring Wilkinson, and his charming wife and daughter, and to each of the corps of instructors and officers of the institution, whose kindly grace and hearty courtesy have made the sojourn here a dwelling among friends.

[Great applause.]

DR. E. M. GALLAUDET: I have no desire to make a lengthy speech, for in connection with such resolutions as these perhaps silence will be golden. But I wish to say, Mr. President, that I have a long, long speech to make in support of these resolutions. I do not intend to make it here, but I intend to make it as I go forward, living the days, months, and years that are allotted to me on this footstool. And the speech that I shall make, telling of the hospitality, the unbounded hospitality and cordial welcome that we have received here at this institution, will go on, and on, and on, and be told to my children and to my grandchildren, and to my friends everywhere, all over the world, as long as I live. [Great applause.] And in that speech I am sure you will all join me, so that the speech which sustains these resolutions shall end only with our expiring breath upon this earth.

The resolutions were then unanimously adopted, amid great applause.

MR. WILKINSON [great applause]: It is simply impossible, my good friends, to say what is in my heart to say. The kindly words which have just been uttered in your hearing and in our presence, deserve a good deal more than I can say. This gathering has been to me the dream, the expectation, and the hope of many years. I have for twenty years, during all my life in California, hoped I should be able to entertain our friends upon this western shore. Ten or eleven years ago, when we seemed to be in something of a condition to make that hope a realization, it went up in flames, and I had to begin again the work of reconstruction, and to defer the gathering which we have so happily witnessed during the past week. Two years ago, as a good many of you remember, I was grievously disappointed; as I had hoped in connection with our good friends here, to have induced the con-

ence of Principals then to come and meet with us in California. But it seemed best, for reasons which you know, that they should not come. And now I am glad that they did not. [Applause.]

It is one of those cases of which I have had quite a number of experiences, during my life, where the thing that I wanted was denied me in order to give me a better. [Applause.] So the loss of two years ago has resulted in this glorious gathering which we have been having for the last week.

I cannot tell you how much joy this thing has brought to me. It would be foolish for me to say it has not been a great deal of work. It has been. But it has more than paid for itself; it has more than paid for all the labor that it has put upon me, or that it has put upon my assistants. It has brought many old friends here, friends of my youth; friends of the beginning of my labors in this profession. It has brought many of the younger ones in the profession, whom it has given me an opportunity of seeing face to face, and whose earnestness and intelligent part in this convention give such abundant promise for the future. The value of meetings like this is not all found in the papers read, or the discussions engaged in. There is a kinship born of this friendly communion that leads to larger love, not only of each other, but of the work in which we are engaged. I never was so proud of my profession as now; I never loved its members as much as to-night.

I wish also to tell you how much all my associates have enjoyed this meeting. I want you to understand how earnestly and how enthusiastically my Board of Directors have coöperated with me in all of the arrangements that have been made for your comfort and convenience. We have not been able to do for you what could have been done by my friend here, Dr. Gillett, a man with five hundred beds at his disposal; but whatever shortcomings you may have discovered, or whatever inconvenience you may have suffered [voices—"There are none"], you may be sure that they have been those only which inexperience could not foresee, and those due simply to the inadequate resources which we have. We have desired to make you comfortable; if we have succeeded I think it is largely due to your patient forbearance. [Great applause.]

It was a sad suggestion that our Chairman made at the close of his remarks. There is little probability that so large a number of the same individuals will ever assemble again this side the Dark River; but it is a comfort to feel that we shall not meet as strangers in the Great Convention on the farther shore, but that the memory of these pleasant days shall abide with us here and there. And now, till we clasp hands by the crystal sea, I bid you God speed, and farewell. [Applause.]

Resolutions of thanks to Dr. Gillett and to Mr. Lord were then adopted unanimously.

By GEO. L. WEED:

Resolved, That the members of this convention hereby express their sense of *obligation* to Dr. P. G. Gillett for his labors in securing special facilities for their transportation hither, thus contributing largely to the success of the convention; making practicable what otherwise would have been difficult for many, and securing the welfare of all.

By MR. MOSES:

Resolved, That the thanks of this convention be tendered to Mr. T. A. Lord for his *interesting lecture on the Samoan Islands*.

MR. CHICKERING, of Washington: In order that immortality may be given to our proceedings and our pleasant memories of all that has been said and done from day to day, I introduce the following resolution:

Resolved, That Professor Warring Wilkinson and Mr. T. d'Estrella be appointed a committee, to whom shall be intrusted the minutes and papers of this convention, for publication and distribution.

This motion on being put was carried unanimously.

On motion of Dr. E. M. Gallaudet, the time and place of the next meeting was left to the standing Executive Committee, with power to determine.

Prayer was then offered by Rev. Dr. Easton, of St. Mark's Church, Berkeley.

THE CHAIRMAN: With great regret I declare the Eleventh Convention of American Instructors of the Deaf and Dumb adjourned sine die.

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PROCEEDINGS
OF THE
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OF
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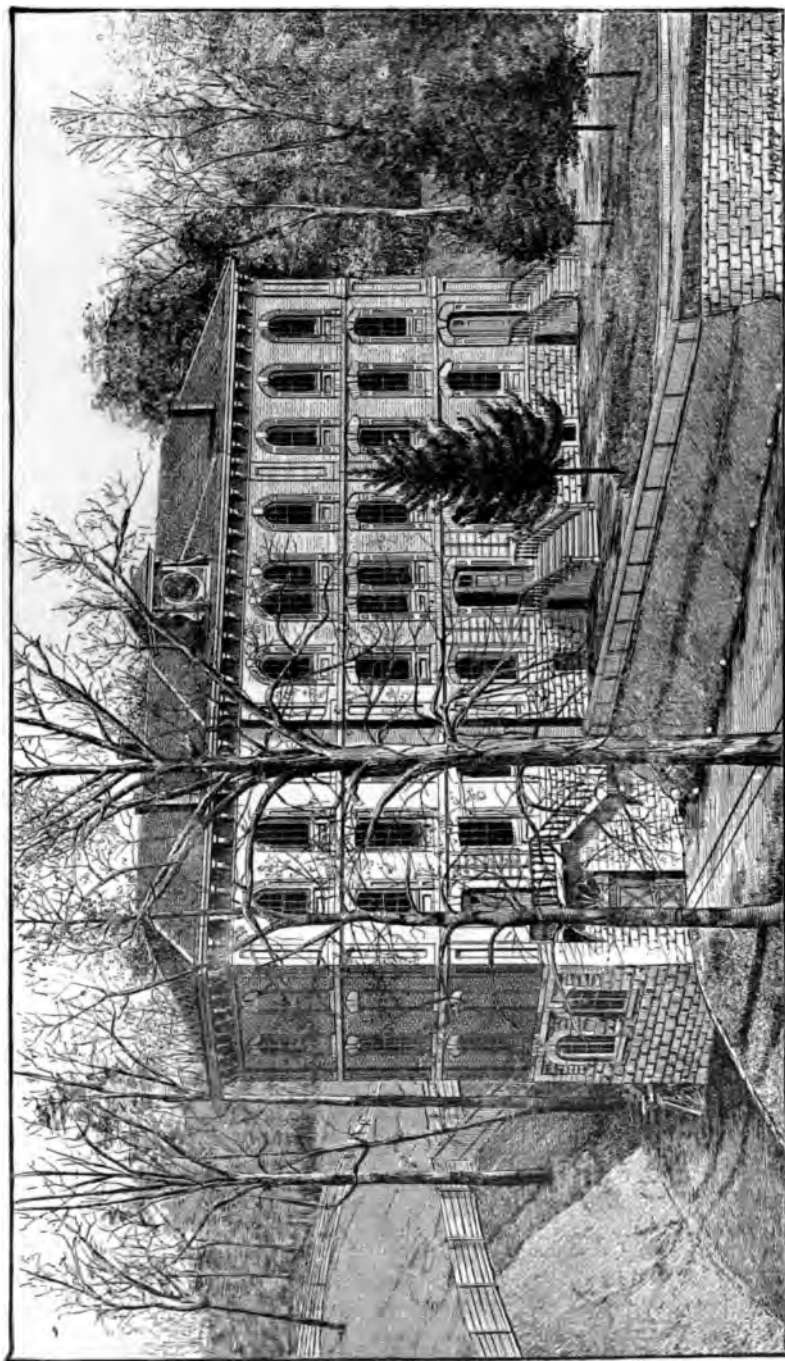
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NEW YORK





TRADES SCHOOL BUILDING.

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ERRATA.

Page 105. Dr. Peet's paper. In the last paragraph on the page, for *methodic* read *significant*.

Page 145. Dr. Williams' paper. In the last diagram on the page, read *James*, *outside* the diagram, and *you*, crossed out, in place of *James*, *within* the diagram.

Page 311. After Mr. Cochrane's name, for *Michigan* read *Wisconsin*.

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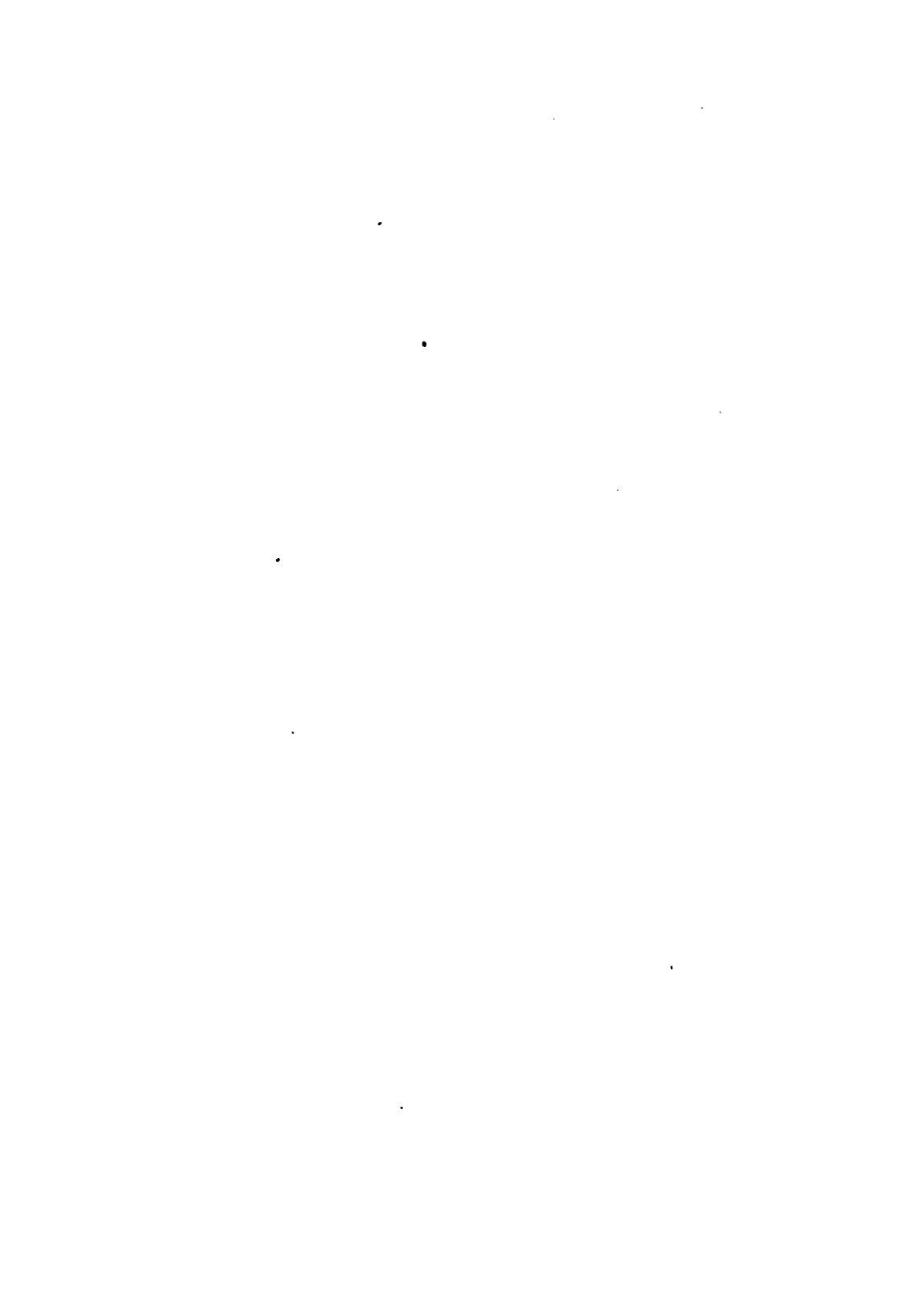
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A. L. E. CROUTER, <i>Chairman</i> , Philadelphia, Pa.,	
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WM. M. CHAMBERLAIN, Rome, N. Y.,	KATE H. FISH, Frederick, Md.



THE PROCEEDINGS.

FIRST DAY.

SATURDAY, August 23.

The Twelfth Convention of the American Instructors of the Deaf and the First International Convention in America opened its sessions in the chapel of the New York Institution, at 3.15 P.M.

DR. E. M. GALLAUDET, of Washington, D.C., Chairman of the Standing Executive Committee of the Convention, called the Convention to order, and spoke as follows :

Ladies and Gentlemen :—The hour is a little past that fixed for the assembling of this convention, but not so much so as to lay us open to the charge of being very tardy.

It is a matter of great interest attaching to the assembling of this convention, that the First Convention of the Instructors of the Deaf in this country was held in this Institution forty years ago this summer. It was the adoption of that then new policy of inviting the attendance of instructors of the deaf in convention, that led to the series of meetings we have had, the value of which, to the great work of teaching the deaf in this country, cannot be overestimated. When we remember, as some of us can, the various conventions that have assembled in Jacksonville, in Columbus, in Staunton, in Indianapolis, in Belleville, and then four years ago, royal time that many of us enjoyed at Berkeley, California; and when we think of all the influence that has grown out of these meetings of instructors of the deaf, and those interested in their education, and of the progress made during all these forty years, I am sure that we may join in blessing God for the work that education in this special line has effected.

It is now my duty, as Chairman of the Executive Committee of the Convention, to read the call of this convention, which will indicate the scope of its membership and the objects that are hoped to be accomplished here.

CALL OF THE TWELFTH CONVENTION.

"NATIONAL DEAF-MUTE COLLEGE,
KENDALL GREEN, WASHINGTON, D. C., April 9, 1890. }

Under date of December 11th, 1889, it was announced in the *Annals* for January last that, in view of the probability of the holding in 1892 of a great National, or International Exhibition in this country, the Standing Executive Committee of the Convention of American Instructors of the Deaf had decided, in deference to the expressed wishes of very many prominent instructors, to postpone the assembling of the Twelfth Convention until 1892.

Since the recent action of Congress has made it certain that the expected exhibition will not be held earlier than 1893, the Committee have concluded that the interests of our profession and its work will be best promoted by the holding of the Twelfth Convention during the summer of the present year, as originally proposed.

The hospitable offer of the New York Institution for the Instruction of the Deaf and Dumb to entertain the Convention has been renewed, and the Committee take pleasure in announcing that the Convention will meet on Saturday, the 23d day of August, 1890, in the New York Institution for the Instruction of the Deaf and Dumb, Washington Heights, New York City.

The Twelfth Convention is to be International in its character, and an invitation to attend it is hereby extended, not only to all persons engaged in the education, or religious instruction of the deaf in America, but to those so interested in all parts of the world.

It is also suggested to the principals of the several schools that they invite such persons as may have been instructors, or are for other reasons interested in deaf-mute education, as might, in their judgment, properly participate in the convention in the capacity of honorary members.

In accordance with the precedent established by the last convention, the Committee recommend to the writers of papers to observe the limit of twenty minutes, and it will be required that no paper shall exceed thirty minutes in its delivery; also, that an abstract, not to exceed one page, be furnished to the Business Committee of the Convention on the first day of the meeting.

Isaac Lewis Peet, LL.D., and Chauncey N. Brainerd, Esq., Principal and Superintendent respectively, of the New York Institution, have been appointed Local Committee of Arrangements, to whom the Committee request early notice may be given of intention to present papers and to attend the Convention.

A circular letter, giving further particulars with respect to the Arrangements for the Convention will be published in a short time.

E. M. GALLAUDET,
I. L. PEET,
P. G. GILLET, }
J. L. NOYES,
CAROLINE A. YALE, }

*Standing Executive Committee
of the Convention.*

So, ladies and gentlemen, we are now at the point of the organization of this the Twelfth Convention, the First International Convention of the Instructors of the Deaf in America. It has been our practice for many years to invite some gentleman interested in the education of the deaf, though perhaps not specially employed in teaching, to honor us by assuming the Chair as the Temporary Presiding Officer of the Convention. It will be remembered, that an honored representative of the Board of Directors of this Institution, the Honorable Erastus Brooks, was the temporary chairman of the convention at California. His death, which has since occurred, is deplored by all who are interested in the work of the instruction of the deaf in this State and elsewhere in the country.

We have with us to-day a gentleman, whose interest in the work of teaching the deaf has been long and great, who has had practical experience in teaching the deaf, and who has shown his deep interest in the advancement of the cause of deaf-mute education and of the interests of the deaf in many ways. We are glad to welcome him here as an honorary member of this convention, and I take especial pleasure in inviting our friend, Dr. Alexander Graham Bell, of Washington, D. C., to occupy the Chair as Temporary Presiding Officer. [Applause.]

Dr. Bell then assumed the Chair.

PROF. E. H. CURRIER, of New York, was requested to act as Temporary Secretary of the Convention, and took his place at the secretary's desk.

DR. BELL then addressed the Convention as follows :

Ladies and Gentlemen :—I feel highly honored that this convention should have asked me to occupy the position of temporary chairman. It always gives me pleasure to co-operate with those who are laboring earnestly to advance the welfare of the deaf. I am happy that you have recognized that I have that desire to co-operate with you all. It is, indeed, a pleasing sight to see so many teachers gathered together of all shades of belief respecting the different methods of instruction, and yet meeting as friends. Each one willing and anxious to help the other in promoting the interests of the deaf.

I must thank you, ladies and gentlemen, for having given me this position.

I will now ask Dr. Peet to deliver the address of welcome.

DR. ISAAC LEWIS PEET, of New York, then addressed the convention as follows :

Mr. President, Ladies and Gentlemen :—A convention in which two continents are represented is a notable event. Especially is it notable when it is composed, as this one is, of thoughtful, educated men and women whose lives have been consecrated to carrying out a benevolent purpose. It is still more notable when, on each and every one of its members rests the responsibility for the success or failure of many lives. If every teacher exercises an influence whether for weal or woe upon those entrusted to his care ; if wisdom, purity, goodness, zeal, industry, attainment and adaptation to their work, are to be sought for among all to whom is entrusted the education of youth ; if in the representative educator should be embodied the doctrines, precepts and example of the Great Teacher to whom the civilized world is indebted for the spirit that tempers and elevates its present wonderful advancement, how peculiarly is this true of the instructor of the deaf.

To him is consigned the development of the mind and heart of a human being isolated from the moulding influences of parental affection, and of all of the associations that lead to a knowledge of a Father in Heaven, of right and wrong, of duty and privilege, by the fact that the closing of the ear-gate has confined him to a world apart, in the midst of which he lives alone. He makes, it is true, his own inferences from what it sees, but of all the knowledge that comes from hearing, of all those acquisitions that are gained by the ceaseless questions with which the ordinary child plies his elders, and of all the subtler sentiment that comes from living in an atmosphere pulsated by intellectual activity, he is, alas ! absolutely divested. To him the teacher must be parent, companion, mentor and friend. Holding the key that liberates the imprisoned soul, and possessed of the clue that makes penetrable the labyrinth that environs the prison cell, he feels that he has a mission to fulfill—but if he would enter upon it successfully, he should be prepared to recognize the weakness of the limbs that must be gradually inured to exertion, and, in some cases, the weakness of the eye, that must be gradually accustomed to the light. With a patience, gentleness and solicitude that never falters, he must train and carry, and even wait, as well as lead, and he must exercise singleness

of purpose, a skill in meeting unforeseen difficulties and the true philosophy that underlies all real progress.

There have been many cases in which friendship, patriotism, or devotion to a cause have, in the face of peril and hardship, assumed the office of liberator and guide, but none have called for greater self-abnegation or devotion than have influenced the successful teachers who have met here to-day, that they may discuss principles, compare processes, derive hints, and warm and encourage each other in a work which, though undertaken from no selfish motives, has yet proved, through its inherent fascination, the almost miraculous effects it has produced, and the gratitude of those that have been benefitted by it, a source of happiness as unalloyed as can be expected in this world; has conferred upon many, popular appreciation and enduring distinction; has contributed, by its harmony with and inspiration to intellectual effort and profundity of thought, as well as deep interest in the welfare of others, to that serenity of soul in which earthly ambitions occupy no place, and has, as its culminating reward, secured the approbation of Him who became to them their great exemplar, when He said to a deaf-mute, *Ephphatha*, and, with the word, not only restored him to hearing and speech, but, if his deafness was congenital, performed the greater miracle of endowing him instantaneously with a knowledge of the language of his country.

The Abbe Pendola, one of the most eminent of the Italian teachers, and a man so learned that the government of Sienna felt called upon to remove him from the administration of the Institution for the Deaf, on which his services had for so many years conferred distinction, and ask him to accept the control of the National University, once remarked to my father and myself when we were paying him a visit in his new field of labor: "The government has placed *me* here, but," pointing towards the Institution above mentioned, "*my heart* is there. It was there that I came to attain what degree of philosophy I possess. I do not say that either I or the majority of teachers of the deaf are great philosophers, but no man can be such a teacher without being a greater philosopher than he otherwise would be, for the teacher of the deaf is constantly occupied with the analysis of language, which is the analysis of ideas—an analysis at the foundation of all true philosophy."

Judging from the presence to-day of those who have shed lustre upon previous conventions, and from the already acquired reputation of others, who meet them for the first time, this will be found true in the proceedings of this occasion, an occasion from which we can look back to the great masters of the Eighteenth Century, De l'Epee, Heinicke and Braidwood, in whose personalities were brought to a focus, through the lens of preceding centuries, the light emanating from casual experiment and sporadic experience, and who almost simultaneously established the public education of the Deaf in France, Germany and Great Britain. With them came the dawn of an era which has gone on shining more and more until we almost witness the full splendor of the perfect day. And yet, strange as it may seem, the fundamental principles of these great men differed almost as much as do the characteristics of the great nations of which they may properly be said to have been types. Who would think of a Frenchman

without gesture, of a German without the deification of an idea, or of a Scotchman or Englishman who would move without a precedent ?

De l'Epee perceived in the deaf-mute a being ready to be invested with a language of signs corresponding to his original pictorial modes of thought, and capable of becoming the interpreter of all other language. Heinicke saw in him one whose apparently perfect vocal organs made it possible to endow him with speech, which he regarded as the foundation of human thought. Braidwood looked upon him as one who might be made to comprehend and use the language of speech or of writing, by means analogous to those which give to the hearing a knowledge of their native tongue.

We have here to-day representatives of the systems they established, easily recognized as adherents, respectively, of Signs, Articulation and Dactylology. They meet together not as opponents but as friends—not as bigots but as inquirers, not as jealous rivals but as generous competitors, each believing that he has found the better way. As the different schools of medicine, after becoming familiar with the operations of each other, unconsciously borrow methods and remedies once believed exclusive property, one perhaps giving smaller doses, another less extended triturations, and both seeing value in the virtues of cold water judiciously applied, of massage and of electricity, each of which has had its advocates as the paramount factors of health, are inclined to meet on the neutral ground of diet, regimen and common sense, and acknowledge alike fealty to the exact and incontrovertible science of Surgery ; so, in a convention like this, representatives of differing systems must derive benefit from learning what the advocates of others than their own do and do not believe, how far they may walk together in common, and what principles lie at the root of all that they respectively undertake to accomplish.

It is but seventy-two and seventy-three years since two institutions, the first in Hartford and the second in New York, began this great work in the United States of America with a handful of pupils. Rapidly increasing in numbers, they sent forth teachers to establish Schools in other States, which alike planted offshoots in still other portions of the country, till now there is hardly a State or a Territory in which does not exist at least one or more Institutions for the deaf—aggregating 8,575 pupils under 615 teachers.

The State of New York alone, with a liberality that does her honor, gives free education to 1,271.

There is, too, a college for higher education, at the seat of Government in Washington, presided over by a man who has inherited the genius and the virtues of his father, Thomas Hopkins Gallaudet, who was the instrument under Providence of introducing the system of De l'Epee into this country.

Outside of the United States, there were, in the year 1883, 397 schools, with an aggregate of 26,473 students.

The results of the education thus imparted have been marvelous, when we compare the successes of the last century with the hopelessness of the time when Lucretius wrote :—

“To instruct the deaf no art can ever reach,
No care improve them, and no wisdom teach.”

The graduates of these schools are found in all the various depart-

ments of productive industry, in the marts of trade, and even in the learned professions, that of medicine alone being an exception. They shine as artists, as inventors, and as teachers. They render valuable service in the different departments of the government—whether General, State or Municipal.

They are, above all, respected, self-supporting, and often influential citizens, returning even a greater proportional equivalent for the amount of public money expended in their instruction, than those among the hearing who enjoy the privileges of the free education so universal in this enlightened land.

To you who have contributed, directly, as instructors toward this wonderful achievement ; to you who have sustained it by attending to the important details of domestic management ; to you who, as directors and trustees of the Institutions fostered by the State and General governments, have wisely and conscientiously fulfilled the trust imposed upon you in connection with this great work ; to you, who, like the Rev. Dr. Thomas Gallaudet, shepherd and bishop of souls, eldest son of the pioneer, in this country, to whom allusion has already been made, have devoted yourselves to the religious, moral and material welfare of deaf-mutes, after they have emerged from the guardianship of the schools ; and to you who represent that increasing number who are making themselves felt as special friends of the deaf ; the directors, life-members, officers and teachers of this Institution extend a welcome, hearty, sincere and grateful, assuring you, that in honoring the Institution by your presence and partaking of such hospitality as it is in its power to extend to you, you are but strengthening them to greater and higher endeavor.

DR. BELL : I will call upon Rev. Dr. Thomas Gallaudet to make a few remarks.

REV. DR. THOMAS GALLAUDET, of New York, then addressed the Convention as follows :

Ladies and Gentlemen :—In listening to some remarks made by the Chairman of the Executive Committee, and also the thoughts expressed by our honored friend, the Principal of this Institution, I must be pardoned if I say that I am stirred by unusual emotions. I feel more deeply this afternoon than ever before in my life that I have reached a point where I can call myself a representative man, a sort of a connecting link, to use a common expression, between this and a by-gone generation. Forty-seven years ago—I go back to the New York Institution, as it was on Fiftieth Street at the corner of Fourth Avenue, I attended there fifteen years as a teacher under the elder Dr. Peet. I had left a dear deaf-mute mother at my home, and I had gone out into the world thinking to myself that, much as I loved her, I should not marry a deaf-mute, but in the New York Institution I found one who very suddenly converted me, and I have had for forty-five years a deaf-mute wife. The old New York Institution had many very dear and pleasant associations for me. It will interest you to know that that old site consecrated to the cause of education has not yet been overrun by the business interests of our great metropolis. Columbia College came in, and the mantle of the New York Institution was

thrown upon that venerable institution, the old site that we left in 1856, has been continued as a seat of learning. Doubtless, there is a grander future for that institution than it has ever had under its new departure. It may interest you for the moment to recall a veteran in the service, Dr. Frederick A. P. Barnard, who taught in the old New York Institution at Fiftieth Street, and who after twenty-five or thirty years spent in Southern cities interested in the cause of education, came back to the very spot he left, as President of Columbia College. These facts, perhaps, are not germane to the present convention, but I could not resist the feeling that they might interest some persons, because we ought all to know something of these associations that have been formed as we work out the great battle of life. After continuing until 1858 in the New York Institution as a teacher, I left to commence a work, the result of which I little foresaw. I will not dwell upon this. Soon after leaving the Institution as a teacher, I had the honor and privilege of being elected to the Board of Directors, so that I have, since 1843, been nearly all the time officially connected with this Institution, which now extends its hospitality to you.

Pardon me if I digress too much in personal allusions, but these thoughts of olden times come rushing over me so that I cannot help giving utterance to them.

I am the only member of the Board of Directors present this afternoon. I trust that the other Directors will be here. I have not the honor to be one of the officers of the Board, except—as Chairman of the Committee on Instruction, which is an important committee; but as a representative of the Board of Directors of the New York Institution for Deaf-Mutes, I extend, in addition to the welcome which has already been given you by the Principal of the Institution, a very cordial welcome.

It will interest you to know that the Board have at several meetings taken steps to make this Convention a thoroughly successful and enjoyable one, and, as the representative of this Department, I will ask our brethren this afternoon to remember that although the Directors do not attend to the details of the school room, and although many of them know but little of the progress of education, still they are a very important factor in this great work to which allusion has been made. I am sure we will specially welcome any of those who may come, because we know that business men find it difficult to leave their ordinary pursuits, so that if any are here this afternoon, or if any should come during the convention, I am sure that the instructors of deaf-mutes will join with me, as an instructor, in giving them a hearty welcome, leaving them to feel that we recognize them as very important helps in the great work entrusted to us. Let us then, dear friends, principals, teachers, officers of institutions, members of boards of direction, let us all feel that we have a great work to accomplish, that we have not come out for a mere holiday, or excursion, that we have the interests of a class of people in our hands, whom the Great Father left for centuries in ignorance and darkness, but that for the last seventy-three years, as Dr. Peet has told you this afternoon in his brief summary, we have seen men and women rise with self-sacrifice and devotion to this great cause and have taught thousands and thousands of these deaf children of the Great

Father to rise higher and higher in the scale of intellectual and moral being. When we look out upon this and feel that the Great Teacher himself, on one occasion, said : "That neither did this man sin nor his parents, that he was born blind, but that the works of God might be manifest in him." The same principle of darkness would seem to apply to deaf-mutes, and that they were under some special displeasure of the Almighty, but we know that there is a gracious purpose in all this, and we believe in the value of these institutions and in the value of all that has been accomplished for the deaf in the last generation. Nothing more noble has been done which should call down the blessings of the Great Being above than that which has been accomplished for our deaf-mute brethren. Let us feel that we are engaged in a very important, a dignified and missionary life. In this, if we be true, act up to the right and be conscientious and persevering, we will have blessings from above. I respond most cordially to what has already been expressed in relation to the friendship, kindness and good-will which pervades a body like this. This must be like other bodies where any class of men assemble to discuss questions. There must be differences of opinion so long as human nature is what it is, but if we can bury all personal feeling and come together in the right spirit and talk over these matters in which we are interested, each one expressing his or her views without prejudice against the other, it seems to me that the result of a meeting like this will be most beneficial to the great cause which we have in hand.

I close with wishing you a successful, pleasant and instructive convention, and that after the sessions are over you may reach your homes in safety and resume work in your various institutions, inspirited by the thoughts and views which will be expressed as we pass along, day by day, through the sessions of this convention.

DR. BELL : Are there any further remarks to be made ; if not, a motion to appoint a Committee on Credentials and Enrollment is in order.

MR. W. G. JENKINS, of Hartford : Mr. President, I move you, according to custom, that a Committee on Credentials and Enrollment be appointed.

Motion seconded. Carried.

DR. BELL : I will appoint as the Committee on Credentials, Mr. W. G. Jenkins, of Hartford, Mr. F. L. Seliney, of Rome, and Mr. H. E. Walker, of Missouri.

MR. R. MATHISON, of Canada : I move that a Committee on Permanent Organization be appointed.

Motion seconded. Carried.

DR. BELL : I appoint as that committee Mr. Mathison, of Canada, Mr. W. A. Caldwell, of Pennsylvania, Mr. H. C. Hammond, of Illinois, Mr. G. W. Veditz, of Colorado, and Miss Laura DeL. Richards, of Rhode Island.

MR. F. D. CLARKE, of Arkansas, then addressed the convention, as follows :

*Mr. Chairman, Ladies and Gentlemen :—*It is with curious feelings that I arise to respond to the welcome here. It seems more proper that mine should be the duty of welcoming to this hall our brothers and

sisters in the work. More than five years have passed since last I stood here, yet it still seems like home to me ; but, if an intimate personal acquaintance with a New York welcome in all its length and breadth and depth, its heartiness, sincerity, and permanence, and joy to be here, fit one to respond, no one is my superior. I know what a welcome here is. More than twenty years ago, I came here a green country boy with hardly a friend in this great city ; one who had borne arms against a flag that nowhere in this broad land was and is loved more than here, and I was welcome. The prodigal son was welcomed by his father, but Scripture tells us, of some symptoms of discontent on the part of his brother. Not so here. The treatment which I received from the honored principal was such as a father gives to his loved son, and from my fellow teachers, better, far better than I deserved. Here I learned all that I know of the deaf, and their instruction ; here I finished an education that war and poverty had stopped ; here I grew from youth to manhood ; here I formed friendships that will end only with life ; here I found the greatest treasure that falls to the lot of mortal man, the love of a gentle, trusting, faithful wife. Do you wonder that I love this place ? Should life stretch forward through uncounted ages ; should all that is beautiful and bright be my lot ; still, brethren, the New York Institution, and the years I have spent here will always be a bright spot in my memory, and the friendships which I have formed here, will, I hope, last beyond the grave. It is good to be here again ; it is good for all of us to be here. This State from her pre-eminence in many ways has won and nobly holds the proud title of the Empire State. Had she done nothing to deserve it but the generosity with which she treats her deaf children, I for one would gladly give it to her. Look around you and see this building, perfect in its kind and in all its appointments. Remember that from its sheltering walls more than thirty-five hundred deaf children have gone forth armed for the battle of life, think that the deaf children of this proud State can enter here at the tender age of six, and if it be necessary, remain for seventeen years, and then reflect that this is but one of seven similar schools. Has not New York nobly done her duty to the deaf ? But that is not all. She not only arms her children for the strife and sends them forth with a God-speed, but if the fates frown, if old age, sickness and poverty conquer in the fight ; on the banks of this beautiful river stands a retreat prepared by loving hands to receive the tired veteran and smooth his pathway to the grave. As for her other charities, how shall I name them ? The gateway of the great tide of immigration, that daily, almost hourly, pours into our country, this City and State shoulder burdens, that all admit should be shared by the entire country.

Whatever there is of good work in all our land, here you will find it in full activity. The buildings of her various charitable and educational institutions would of themselves form a great city, and her annual expenditures for these purposes a handsome revenue for a State. But I cannot tell you of them.

It is well for us, as teachers, to remember that we stand to-day on ground made holy as the home of the first free public school in America ; that this great State first acknowledged the American principle of education, that all the property of all the people should educate all

the children. You all, have long known the immense wealth and activity that center here, but great as is this wealth, tireless as is this energy, the good works done in the Master's name keep time and step ; and the generosity, liberality and justice of the people of the Empire State are as well known as their industry, intelligence and wealth. What this institution has done for our beloved profession would take long to tell. Hardly a school for the deaf but what owes it for the training of some valued officer or teacher, hardly a graduate of any of these schools but has profited by the books written by its two principals, not a system of instruction in all our land but has some method first tried and found perfect here. Need I tell you what New York has done for the conventions of teachers from the very first to this, the last and best. Speaking in the New York Institution as one who was of it, I cannot close without a word for that noble family to which it owes so much. Great as this institution is, noble as is the work that has been done here, I cannot but wonder would either have been, had Providence found other work for the Peets, father and son. When I began my work here, the elder Dr. Peet was enjoying the rest which he had gained by years of ceaseless and untiring toil. I knew him, not as a worker, but as one mighty in counsel, a good word from whose lips was a great prize to us younger teachers, and whose influence for good still prevailed the whole school. His mantle of principal had already fallen upon his son, the present Dr. Peet, no unworthy successor. I cannot draw his character for you. We, who know him best and love him most, used sometimes to think that he had a fault. Here, among his friends, I can tell you what it was. He loved the deaf children under his charge so well, that when any controversy arose between them and his own children, he always took sides with the deaf. For my own part, no father was ever kinder to a son than he was to me. As I look back over the years we spent together, my wonder at his kindness and forbearance grows continually. In all our intercourse, I can recall no word or act of his that even seemed unkind or arbitrary. His sons are following in his footsteps ; and so this name, inseparably linked with that of Gallaudet, will be handed down to the third generation of American instructors of the deaf. And now brethren, let me say once more that I am glad to be here, and let me assure the Board of Directors, the Principal and Superintendent, and these our fellow-teachers, in your name, that we are all most heartily glad to be here, and hope that this convention will be the best and brightest of them all, as it undoubtedly is the largest and most earnest. [Applause.]

DR. BELL : I notice that a friend from a distance, has just come in, one of the veterans of the profession, Dr. Gillett. Perhaps Dr. Gillett would like to make a few remarks.

DR. PHILIP G. GILLETT, of Illinois, then addressed the convention as follows :

Mr. President, Ladies and Gentlemen : I have made a good many inquiries for others to-day, and I have heard that some inquiries have been made for me during my hours of absence since this morning. I assure you that I was with you in spirit and in heart, though I was not present in body. I am very glad to be

with you again. I was present early this morning and left all this business in the hands of my honored and esteemed friend, Dr. Gallaudet, knowing that after the arrival of Dr. Peet, whatever was done would be well done. I am rather sorry that I did not get in a little later, because I had no expectation of being called upon, or being honored, with the opportunity of making any remarks at this time. I am not much of a talking man, I am much better at listening, a great deal better than I am at talking. When I am called upon to make a speech, I am reminded of the good old man out in Illinois—it used to be “out in Illinois,” but it is not “out in Illinois” now. It is out in New York, or out in California; we are pretty nearly the centre of population, and we have in our State what, if it is not already, will soon be, the great metropolitan city of the United States and American Continent. We are a little late, as you see, but “*we will get there.*” I was about to speak of my good old friend in Illinois. He said there were two things he did like, and one of them was long sausages, and the other was short speeches. Now, I can always give a very little speech, and I know you have been having long sausages here to-day. Some one has said that “speech is silver, and silence is golden,” and probably the best thing I can do for you now is to give you the more impressive silence. I am impressed in looking into your faces that we have met here with our faces to the future. While we are prone to look back upon the past and to review the achievements and successes of our fathers, let us not forget that it is for us to look to the future and to meet, like men, as did our fathers, the questions which come to us. These are venerable scenes that we have passed over. Since I left my home, I took the opportunity to spend a day or two amid the scenes of the boyhood of my honored father. I had often heard him speak, during his lifetime, of the scenes by which he was surrounded, and of the men and women whom he met. He told me of the influence that they formed upon him, tending to make his character, as I believe, one of the best men that ever lived—a man who was a peer, among the best of men, in whatever sphere of life he, for the time being, might be acting. When, a few months ago, he was called away, I felt an attachment to the scenes of his boyhood, such as I had never felt during his lifetime, and I determined that, upon the very first favorable opportunity, I would go to the scenes of his boyhood and look upon those hills and mountains and lovely valleys that had so great an influence in the formation of his character—for natural objects indeed do have a wonderful influence in the formation of character—and I felt as though I were treading upon sacred ground. So, here, my friends, I feel I am treading upon sacred ground, when I pass from the scenes that were made sacred and holy by the good men, such as H. P. Peet, F. A. P. Barnard, J. A. Cary and others who have gone before us, as well as by the active and energetic men who are acting in the present. Now, with our faces to the future, we have assembled in this convention, the largest that has ever been brought together, and I am fully convinced it will be one of the most profitable and helpful to the cause of the deaf. We look back upon the past with a great deal of pleasure, upon the achievements we have seen wrought by our co-laborers and by our fathers, but the successes of the past should be incitements to still greater efforts in the future.

As I look into the faces of those who, like myself, are in middle age, and into the faces of those more numerous than we, who are young in life, I feel that the outlook for the future is better than it has ever been before: It is not for us calmly to fold our arms and thank God for what has been done in the past, and think there is nothing left for us to do, but by reason of the achievements and successes that our fathers wrought, it is now for us to take upon ourselves the armor of this work, as we have never done before, and carry it on in our day to greater success than ever before.

My friends, I am glad to be here upon this occasion. I am glad to be able to unite my voice with your voices and my presence with your presence, for anything and everything that may be for the best, that may promise the best results for the work in which we are engaged. I am not here to surrender anything that has proved itself useful. I am not here to hold on to anything when another promising better results presents itself, but taking all the good from each and eschewing all the evil, and all the weakness from each, I feel like selecting the very best that we can carry home to our pupils, and to our friends, and to our associates.

I trust that the blessings of the Lord will be with us on this occasion, for unless He is with us, we shall all labor in vain, however much and however earnestly we may labor.

Dr. BELL: Is the Committee on Permanent Organization ready to report?

Mr. MATHISON, the Chairman of the Committee on Permanent Organization, then addressed the convention as follows:

Mr. Chairman, Ladies and Gentlemen: The Committee on Permanent Organization have had a very difficult task to perform. There are so many clever men and women present that it was a hard matter to select out of the many a few who are to represent the whole. We have endeavored, however, to make a very good selection, and we will present our selection for your approval. Before doing so, however, I hope you will pardon me if I make a few remarks. In listening to the addresses—the address of welcome and the address of the temporary chairman—I failed to notice that they said any thing about Canada. I just want them to understand that we are here, and that we are going to stay here right up to the end of the convention. We consider it a privilege to come here, and we want to meet our brothers and sisters engaged in this good work from the different States represented. In California, four years ago, I was alone; I was all right, however, but this time I think we have come down about twenty strong. We are not going to annex you just now. Your protective tariff and your Behring Sea dispute have not kept us from you. We come as friends and neighbors representing a nationality to the north which has square miles as large as you, Alaska included. Quite a number of persons believe that Alaska does not amount to much. I think it does. It joins our territory, and there has been considerable dispute about the seals, or something, at the present time, but I hope it will all be satisfactorily arranged. You have a population of about sixty-four millions, according to the last census. We have a population close upon six millions. Of course,

there is considerable difference between the two just at present, but give us a chance. If we have time we may come up to you. I can say that in the Province of Quebec at the last session, an act was passed giving one hundred acres of land to every head of a family that could show twelve children alive [laughter], and up to the present time over one thousand applications have been received, with a large back territory to hear from. We come to see you here, as I said, as neighbors and friends, to join with you in the advancement of this great work. We come to you imbued with the responsibilities that we have and to tell you that we are trying to do our best for the education of the deaf in our country. I feel sure that this convention may be a vast benefit to all of us. We shall get acquainted with each other, compare notes, and go home feeling that we are in a great and good work. We don't intend to stay here now that we are here, except until the end of the convention. We have had in the past quite a number from your side to come and stay with us, and they really thought it was a good place to stay. We don't want them. Four years ago, on our way to the last Convention, if you remember, we remained over at Utah, Salt Lake City, and we saw the great Mormon settlement there. At that time we had not much of a Mormon Settlement ourselves; but we have been improving, if you can call it improving, in that direction. We don't like it very well. Some of those in Utah came to our territory and are endeavoring to form a colony in the northwest. We don't like emigrants of that kind. I might tell you in confidence, ladies and gentlemen, that on our side of the line a great many of us have trouble enough with one wife, and a great many more have got into trouble by promising to marry and failing to carry out the promise. I don't know that I should inflict any more of this speech upon you, only please recollect that we are here from Canada, and that we appropriate part of the welcome given to those of the whole world, although there was no special mention made of us. We have had so many kind greetings since we came here that we feel at home already, and if there is anybody who wants to get acquainted with us from Canada, we will be very glad to get acquainted with you. We want to know everybody that is in this assembly. I think the people in the State of New York, and probably a great many of you here, have a very imperfect idea of Canada any way. I was down in the State of New York a few years ago, and I visited a school. The principal of the school took me around and showed me his school rooms and the pupils. There was one class that he said was particularly well up in geography and any question put to that class would be answered satisfactorily, and he particularly asked that Canada might be the subject of the questions, so I asked: How many provinces are there in Canada, and their names? They readily answered, as quick as a flash, that there were two, and that their names were Upper and Lower Canada. Why, Upper and Lower Canada have been wiped out for twenty years, and so you can really see how imperfect the knowledge of such things is.

The following is the ticket which the Committee have prepared, and which, I trust, will be endorsed by you:

For President.—W. Wilkinson, of California. I need not ask you to endorse that. I know it will be endorsed unanimously. We, who had

the pleasure of being in California, four years ago, will certainly endorse it.

For Vice-Presidents.—J. Scott Hutton, of Nova Scotia ; Job Williams, of Hartford ; S. J. Vail, of Indiana ; D. Greenberger, of New York ; Miss E. L. Barton, of Portland, Me. ; J. R. Dobyns, of Mississippi ; R. P. McGregor, of Ohio ; and A. G. Draper, of Washington, D. C.

For Secretaries.—E. H. Currier, of New York ; W. A. Cochrane, of Wisconsin ; and Thomas F. Fox, of New York.

For Railway Secretary.—C. N. Brainerd, of New York.

I beg to move, Mr. Chairman, that the names I have read be permanent officers of this convention.

The motion was carried unanimously.

DR. BELL : The pleasant duty now devolves upon me of welcoming my successor to the Chair. I am sure that it gives me great pleasure to welcome him to this position.

DR. WARRING WILKINSON, of California, being escorted to the Chair, addressed the convention, as follows :

I thank you, ladies and gentlemen, friends and fellow-workers, for the unexpected honor you have conferred upon me of presiding over the deliberations of this, the Twelfth Convention of American Instructors of the Deaf. I accept the office with a proper sense, I trust, of its great responsibilities and duties, and with a hearty appreciation of your kindness, but in no spirit of vain glory, and with no feeling that I am any more worthy than many members of this Convention of this distinguished honor. I am led to believe that you have selected this way of paying a delicate compliment to the State, which I represent, and which has done a good deal for the deaf on the western shore of this continent, and in the name of California, as well as for myself, I thank you.

In the address which our worthy temporary Chairman gave you, and in the address of welcome from the respected Principal of this Institution, allusion was made to the beneficent effect of bringing us together on these quadrennial occasions. I believe that the greatest aid and the greatest good that we receive in coming together is in the personal intercourse of members. I do not expect or believe, that at this Convention or any subsequent convention, any radically new method of instruction for the deaf will be devised, for, since the Abbe De l'Epee established his school, in the middle of the last century in France, upon the theory that it makes little difference what symbol we use for an object, so that we agree upon it ; and since Samuel Heinicke established his school upon the theory that there could be no intellectual development without speech, the work of deaf-mute instruction has been pushed along on those two lines of endeavor. I think it always will be, but I believe we are coming nearer and nearer together, and as Dr. Bell said, we are losing that bitterness which, at one time was considerable. We are coming more and more to appreciate each other's motives and spirit, and agreeing to disagree where we must, and yet we are agreeing more and more every year. I think in this profession, perhaps, more than in any other, there is a

greater disposition and willingness to sink individuality and personality and merge into united effort than in almost any work I know of. In the ancient city of Cologne there is a cathedral, finished not long since, whose foundations were laid way back in the Dark Ages, hundreds of years ago. Slowly it has risen, stone by stone, pillar by pillar, arch by arch. Men have given the labor of their lives to the rearing of its walls, and then lain down and died beneath the shadow of their work, satisfied to remain unhonored and unknown if they might contribute something to that temple of God. Its windows are painted by artists unknown, its pillars are carved by sculptors who left no trade mark behind them, all willing to merge their individuality in the grand unity and beauty of a splendid work of art. It seems to me that the building of that cathedral is the type and symbol of any and every great work undertaken for God and humanity; and of all the beneficent works that have been devised for the amelioration and betterment of mankind, the education of the deaf has been, and is, second to none. I am sure, my dear friends, that we shall meet here and conduct the proceedings of this convention in a spirit of harmony worthy of the vocation to which we are called. Let us sink all personality, and let no bitterness characterize our debates. In and with the spirit of those medieval builders, let us be content to give life and labor without hope of earthly reward, if it be permitted us only to do something to advance this glorious work which you and I, and all of us, love so much. And now asking the blessing of God upon the deliberations of this gathering, I await the further order of the convention. [Applause.]

MR. C. W. ELY: If this is the proper time, I move that a Committee upon the Order of Business be appointed.

Motion seconded. Carried.

THE PRESIDENT: I will appoint, as a Committee of Business, C. W. Ely, Maryland; G. O. Fay, Hartford; W. K. Argo, Kentucky; James Denison, Washington; F. D. Clarke, Arkansas, and S. T. Walker, Kansas.

MR. CLARKE, of Arkansas: I have a suggestion to make, I don't know whether I shall call it a motion or not, it is, that we depart a little from our method of interpreting at this convention. The methods we have adopted before have worked well in some cases, but in others have not given great satisfaction. I would suggest that the Chair appoint a committee of three deaf-mutes who shall have charge of the interpreting; that it will be their duty to ask the gentlemen who are to read papers whom they wish to interpret for them; it will also be their duty to see that some one is on the platform to interpret at all times. There are plenty of them to do this work, and I think in this way it will be done a great deal better. I hardly think it necessary to put this in the form of a motion.

REV. DR. GALLAUDET, of New York: A feature of former conventions, particularly of the California Convention, was that writers of papers selected their own interpreters; there was generally some understanding beforehand and some little preparation made, so that there should be no difficulty. I presume Mr. Clarke only desires that we shall have good interpreters on the platform, and that all those present shall have the full benefit of the entire proceedings.

MR. CLARKE : I desire particularly that the deaf themselves shall be satisfied.

THE PRESIDENT : Will Mr. Clarke put that in the form of a motion ?

MR. CLARKE : I will.

The motion was carried.

THE PRESIDENT : I will appoint as such Committee, W. G. Jones, New York ; W. Hubbard, Michigan ; T. H. Jewell, Rome, N. Y.

DR. GILLETT, of Illinois : For reasons to which nobody can object, I suggest that hereafter the vote be taken by a raising of hands rather than by the yeas and nays.

THE PRESIDENT : If there is no objection, that will be done, and hereafter votes will be taken by a raising of the hand.

MR. CLARKE : I have a resolution which I would like to offer : *Resolved*, That the Standing Executive Committee of the Convention be requested to present their report early, not later than Tuesday morning, and that the Business Committee be requested to arrange for and announce the time for its consideration.

You will remember, sir, that at California the report of this Committee, the importance of which we all know, was brought in very late, and at a time when we were very busy. The committee was at that time continued for four years. We came very near not having any committee at all. As this is the most important committee of the convention, I think it is but just that we should know beforehand when its report is to be presented. I now offer this resolution.

The resolution was adopted.

DR. BELL : If I am in order, I would like to direct the attention of the convention to a resolution that was passed by the Third Convention of Articulation Teachers, which met in this city in 1884.

The resolution reads as follows :

Resolved, That the Convention of American Instructors of the Deaf and Dumb be requested to organize a section of the convention for the promotion of articulation teaching.

Resolved, That this request be transmitted to the Executive Committee of the Convention.

This resolution was proposed by Prof. Gordon, seconded by President Gallaudet, and was carried unanimously.

Two years later, the Convention of American Instructors met in California. I was not present upon that occasion, and do not know, therefore, what consideration the resolution received. So far as the printed proceedings show, the resolution was not brought formally to the attention of the Convention at all. Under these circumstances, I feel that some responsibility rests upon me as President of the Convention that passed the resolution, to bring the matter to your attention now.

The resolution suggests a change in the organization of this body by the formation of sections for the consideration of special subjects, and the Articulation Convention has asked, unanimously, for a section of articulation, to be devoted exclusively to the promotion of articulation teaching.

Nearly all large bodies, dealing with large subjects, have found it advisable to consider, in general session, only those subjects that are of general interest, and to reserve for special sections those topics that are chiefly an interest to special ~~sections~~ example, the American Associa-

tion for the Advancement of Science is divided into "Sections A, B and C," and devoted respectively to Physics, Chemistry, Mathematics, Anthropology, etc. The Association, as a whole, meets every day for the transaction of business and for the consideration and discussion of papers that are of interest to all. The body then splits up into sections for the consideration of special topics, and these sectional meetings are held simultaneously. Physical papers are read in one room, chemical papers in another, etc. And the members of the Association are free to attend any of the sectional meetings they desire. A list of the papers to be read in each section is published every morning, so that members may know where to go to listen to any paper in which they may feel an interest.

Sections A, B, C, etc., are organized upon the model of the general association, each section having its own president, vice-presidents and secretary; and the presidents of the sections are vice-presidents of the whole association.

The interests of articulation teaching demand the discussion by specialists, of points relating to articulation work that are of little interest to those not specially engaged in the work. To meet this want, the articulation teachers of America have held three separate conventions of their own. The last convention in 1884 was attended by more than two hundred delegates. A committee, of which I am Chairman, was appointed to call another convention whenever it seemed desirable, but the resolution which I have just read expressed the sense of the meeting that it would be better to organize an articulation section of the General Convention under its own officers rather than hold separate conventions.

I trust, therefore, that the Business Committee of this convention may give the matter attention.

Dr. WILLIAMS, of Hartford: Now that this subject has come up, I desire to say that I am opposed to dividing the convention. It seems to me that every teacher, who is interested in the subject of deaf-mute education, ought to take a broader view of his profession than to take articulation, by itself, or signs by themselves. I am opposed to taking any particular subject for side consideration. I hope that every teacher here is broad enough to take an interest in every branch of deaf-mute instruction, and I, for one, want to hear all that I can. I want to hear all that is said in the department of signs and in any other branch of instruction, whether it is sign-language itself, or the sign-language combined with articulation. I hope we shall not allow any division on these subjects, but that we shall all take an interest in every department, giving our attention to it, and encouraging those who are engaged in any department by our presence and attention, showing that we have an interest in all these different subjects.

REV. DR. GALLAUDET: As a sort of a compromise between these two views, I would suggest that between the sessions of the convention there might be a reasonable time in which persons could consult on these methods—these various methods of instruction. Then they could come into the convention and give us the benefit of their consultation.

DR. E. A. FAY, of Washington : I concur with the views of Dr. Bell. I believe that it would be a good thing to devote one section of this convention to the subject of articulation, or to divide the normal work into schools, one of which should be devoted to articulation, as was done at the California Convention. I hope some such arrangement will be reported by the Business Committee to this convention.

DR. WILLIAMS : I would like to ask the gentleman if he would have these different sections all carrying on their work at the same time.

DR. E. A. FAY : They did not in the California Convention, and I hope they will not in this.

DR. WILLIAMS : It does not make any difference what we call it, a section or division, so long as the section includes the whole convention. All I desire is that I shall have the benefit of any discussion there may be on the subject of articulation as well as on every other subject. I do not think it would be well to have one section considering articulation, while another section was considering some other subject. I hope we shall all have a chance to hear what is being said in each department.

DR. J. L. NOYES, of Minnesota : I would like to call upon Dr. Fay, of Hartford, who has charge of the Normal Department, and ask him if he has any special time or space devoted to the subject of articulation. I think he may be able to throw some light upon this matter.

DR. G. O. FAY : I would say that, in making arrangements for this convention, care was taken to arrange for the presentation of papers and a fair treatment of the subject of articulation as well as the other branches of deaf-mute education. Mr. Greenberger, of this city, has consented to take the lead in this department of education, and we will have an opportunity of acquainting ourselves fully with this branch.

MR. D. R. TILLINGHAST, of North Carolina : If this convention be divided into sections, a person coming here, wanting to gain information about two different methods, if those two methods are being discussed at the same time, would find it impossible to gain the information that he desired ; he could only be in one place at one time ; he could not have a part of his body in one section and a part in another.

DR. E. M. GALLAUDET, of Washington, D. C. : If my memory serves me right, the resolution referred to by Dr. Bell was adopted at the convention of 1884. I cannot remember at this moment, and I have not referred to the proceedings of the California Convention, but I think it must have been reported to that convention. I am quite certain that the recommendation embraced in that resolution was taken into account in the arrangements which were made for the Normal School Department. I am certain that at the California Convention time was taken for the discussion of questions and the presentation of papers upon this subject, in which the whole convention took a very lively interest. My own feeling is like that of Dr. Williams, of Hartford,—that we should take an interest in all the questions of deaf-mute education. If any important feature is to be discussed here, such discussion should be had at times and in such shape that all who are interested can have the benefit of all that is said. In other words, we, who are the heads of institutions, have to be a little like old Tom

Scott, of the Pennsylvania Railroad,—when he came to Washington to get something from Congress, he said he did not want to be piggish, but he wanted all. We want all we can get here, and we can hardly divide ourselves into sections and be interested in matters going on in different places at the same time. I really think there will be no difficulty in carrying out the recommendation of the convention. Dr. Fay, of Hartford, in arranging the Normal School Department, has made a most suitable selection in having so eminent a teacher as Mr. Greenberger to conduct the exercises of the oral section. We shall certainly carry out the spirit of that resolution, and I hope that Dr. Bell will feel satisfied with this arrangement.

DR. BELL: You will understand that I have not risen to ask the convention to adopt this resolution. I simply stated that it was a resolution, emanating from Professor Gordon, seconded by Dr. Gallaudet and unanimously passed by the convention. I was simply anxious that it should be brought before this convention and considered.

DR. E. A. FAY: I move that that resolution be referred to the Committee on Order of Business.

Motion carried.

DR. NOYES: I would like to inquire from the Chairman of the Local Committee if there are any reports or communications from absentees which are to be read, and if so, I think this will be a good time to present them.

DR. PEET: I have quite a number of letters which I shall be glad to read as occasion offers. Special interest attaches to one from Hon. A. S. Draper, because, as the head of the Department of Public Instruction, he is charged with the appointment, in this and the other six New York Institutions, of those pupils who are supported directly by the State, and has in connection with the discharge of his duty showed an intelligent appreciation of our work.

Another, from Rev. Dr. William Stainer is noteworthy from the fact that the writer has a peculiar relation to the deaf residing in the City of London, in England. He is the superintendent of the deaf-mute department of the public school system of that great metropolis, and supplies teachers for deaf-mute children to whom have been assigned classrooms in some of the public schools established for the instruction of hearing children. From the nature of the case, several of these schools are not within easy walking distance of the majority of the deaf children that attend them, and Dr. Stainer has, therefore, by means of benevolent aid furnished to him, established in the immediate vicinity, homes where his deaf pupils are furnished with board and lodging during five days in the week.

Another letter is from Rev. George E. Day, D.D., one of the professors in Yale College, who was associated with my father in this institution in the year 1834, fifty-six years ago, and who has enriched the literature of our profession by two valuable reports on the schools for the deaf on the continent of Europe.

I have two letters from Mr. Richard Elliott, the head of the two establishments for the deaf, one in Old Kent Road, near London, and the other in Margate, united under one management, who represents the oldest school for the deaf in England. Time fails me to allude to

the other letters, all of interest, and all representing persons honored in our profession.

DR. E. M. GALLAUDET : While this presentation of letters is in order, I would like to make a very brief reference to a letter, which I have received to-day from one who is well-known to the work of teaching the deaf, one whom many of us have met in England, and whose hospitality has made us glad when we have been there. I refer to the now venerable, though still hale and hearty, Doctor David Buxton. He was for some years at the head of the Liverpool School for the Deaf, and afterwards connected with the Normal School at Ealing, and is now at the head of a mission for the Deaf and Dumb in Manchester, England. Dr. Buxton writes a letter, which is mainly personal to myself. In it, he expresses his very great regret at not being able, at this time, to cross the ocean and take part in this convention. He gives his heartiest greetings to the members of this convention, and especially to those of his friends who may be assembled here.

DR. NOYES : I wish to add just a word. I desire to extend to this convention a few words of regret and of congratulation from Mr. A. R. Spear, a graduate of the National College at Washington, who has recently been appointed superintendent of a new school in North Dakota. Had this convention be called some two or three weeks sooner, he would have been very glad to have been a member of the convention, but his duties in Dakota required his attendance there, and he was unable to leave and return in time to take up the duties that devolve upon him as superintendent of that institution. I would also like to add a few words for Mr. J. C. Watson, the Principal of the institution in Winnipeg, Manitoba. He has written very recently, expressing his sincere regret at being unable to attend this convention, in consequence of the duties devolving upon him in the position of which he is now occupying. A new building is now being erected, and he has not been given time to come and attend the sessions of this convention. If he came, he could not return in time to assume his duties as Principal of the institution in Winnipeg. Other gentlemen, whom I have met, have expressed regret at their inability to be present, because the convention is held so late in the season that they would not have time to return to their institutions by the first week in September.

The following letters were then presented :

STATE OF NEW YORK, DEPARTMENT OF PUBLIC INSTRUCTION, }
SUPERINTENDENT'S OFFICE, ALBANY, August 14, 1890. }

ISAAC LEWIS PEET, Esq., Station M, New York City ;

SIR :—I am in receipt of your very polite note of the 12th inst., inviting me to attend the Convention of the Instructors of the Deaf, and to occupy the Chair upon that occasion.

It will afford me much pleasure to be with you, if I can so arrange it. I cannot at present definitely say whether it will be possible or not. In any event, you must not count upon my attendance, and certainly not upon my presiding over the conference. When the time comes, if it is possible for me to go down for a day or so, I will do so with much pleasure. I am,

Yours respectfully,

A. S. DRAFER, *Superintendent.*

LAKE PLACID, N. Y., August 12, 1890.

MY DEAR DR. PEET :—Your cordial invitation to attend the approaching International Convention of Instructors of the Deaf and Dumb, is one which it would give me the greatest pleasure to accept, not only because of my general interest in the subject of the discussions, but as the only survivor of your honored father's first associates in the New York Institution,—Vaisse, Barnard, Bartlett, Brown, Cary, Fay and Keep. I fear, however, at the distance at which I find myself from New York and in the necessity I may be of going farther north, that I shall not be able to be present, as I had hoped to be, when in prospect of spending the month of August at Lake Minnewaska.

Trusting that the proposed convention will be eminently successful in promoting the interests of deaf-mute education, I remain,

Very truly and cordially yours,
GEORGE E. DAY.

ASSOCIATION FOR THE ORAL INSTRUCTION OF THE DEAF AND DUMB.
(*Training College and School.*)

Under the Patronage of their Royal Highnesses, the Prince and Princess of Wales.
11 FITZROY SQUARE, W., June 26, 1890.

MESSERS. PEET AND BRAINERD, *Local Committee of the Convention*,
New York Association for the Instruction of the Deaf and Dumb,
Station M, New York City.

GENTLEMEN :—Your kind invitation to attend the Twelfth Convention of American Instructors of the Deaf has duly come to hand, and whilst fully sympathizing with the objects of your conference, I deeply regret the impossibility of my being able to be amongst you ; but I wish to assure you, and all my American colleagues, of my sympathy, and most sincere wishes for the success of the meeting.

I shall be happy to contribute as a member and to receive the printed accounts of your labors. With renewed best wishes, I am, Gentlemen,

Sincerely yours,
WILLIAM VAN PRAAGH, *Director.*

ASYLUM FOR THE DEAF AND DUMB, OLD KENT ROAD, }
LONDON AND MARGATE, 24th July, 1890. }

DEAR DR. PEET :—I am exceedingly sorry that I am unable to accept your kind invitation to attend the Convention which is to take place in August. I hoped, at one time, to have enjoyed the great pleasure it would be to me to join in so important a gathering, and to see for myself the evidences of the success of the great work you are engaged in ; but various circumstances have combined to make it very difficult for me to do so this year. I still hope, however, that I may in the near future visit your great country, and see its Institutions for the Education of the Deaf.

I trust the Convention may be a great success, and that it may help forward the cause we all have at heart. We, on this side of the Atlantic, have rather an anxious time in view of the impending legislation for the education of the deaf, and are hoping that it may be so wisely directed as to prove a real boon. Your experience in the same direction will be a wise guide for us to follow. I am

Yours very faithfully,
RICHARD ELLIOTT.

To DR. I. L. PEET.

ASYLUM FOR THE DEAF AND DUMB, }
VICTORIA ROAD, MARGATE, KENT, August 16, 1890. }

MY DEAR DR. PEET :—Your letter of the 28th of July, I found awaiting me on my return from vacation two days ago. I had already written to you. And I need not say, further, how much I feel indebted to you for your kind and pressing invitation to attend the convention. Nothing would have given me greater pleasure than to do so had I been able, nor do I, in any way, undervalue the importance of the gathering. I am sure its deliberations will be of great interest,

and I look for the expression of valuable opinions on our work, which I hope I may have the privilege of reading. It is my misfortune that I cannot hear them.

As I said before, I have promised myself the pleasure and profit of inspecting your work; but from various unfortunate reasons it could not be this year.

We are going on our way quietly, but I hope, in some degree, successfully. We have many drawbacks to our work, and many obstacles to encounter, and all these prevent that complete success which we all aspire to. You have heard, doubtless, that State aid for Scotland is passed, but England and Ireland—*i.e.*, about six-sevenths of our population still have to wait.

Faithfully yours,

RICHARD ELLIOTT.

STAINER HOUSE, PADDINGTON GREEN, }
LONDON, W., June 7, 1890.

DEAR DR. PEET :—Your convention is a great temptation to me to come across and shake hands with you once more. I am, however, not sure that I shall be able to be away at the time, as the first day of your meetings is the last day of my vacation, and to extend it is difficult with my many responsibilities. I should like to be a member of the international convention, if you will kindly enter my name and let me know what fee will be required, also what advantages the companies offer for transit from Liverpool to New York. How many days will it last, and will there be any excursions organized *before* or *after* the convention? Will any of the schools be in session or special arrangements made for visiting them?

You may not know that I have returned to my "first love" and am acting Chaplain of St. Saviour's Church for the Deaf and Dumb, Oxford Street, where I preach in signs and interpret sermons. My views of oral teaching are modified since 1884, when I last visited your country. I suppose Professor Bell will attend, but I hope we shall not be flooded with theories. I like to talk with practical men on practical work, and the pleasure of comparing experiences with such is an inducement to me to join you. With kind regards to Mrs. Peet, believe me.

Yours very sincerely,

W. STAINER.

VICTORIAN DEAF AND DUMB INSTITUTION, }
ST. KILDA ROAD (PRAHRAN), MELBOURNE, 12th July, 1890. }

DEAR SIR :—I have the honor to inform you that your kind invitation to Mr. F. J. Rose, the Principal of this Institution, to attend the International Convention of American Instructors of the Deaf, to be held in New York on the 23d prox., did not reach him until the 28th ult. The same was duly laid before the committee per first opportunity, when great sympathy was expressed with the objects of the Convention, but as the intervening time was so brief, no steps were taken to appoint a representative. Thanking you for remembering this Institution, and hoping to receive a full report of the Convention, I have the honor to be, dear sir,

Your obedient servant,

WILLIAM MOSS,

Honorary Secretary.

To ISAAC LEWIS PEET, Esq., LL.D., NEW YORK.

VICTORIAN DEAF AND DUMB INSTITUTION, }
ST. KILDA ROAD, MELBOURNE, July 14, 1890. }

PRINCIPAL ISAAC LEWIS PEET, LL.D.,

New York Institution for the Instruction of the Deaf and Dumb,
New York City, U. S. America.

DEAR SIR :—With this you will receive an official letter in reply to your kind invitation, extended to me to be present at the Twelfth Convention of American Instructors of the Deaf, etc. I am extremely obliged for the courtesy shown me, but to my regret, I am unable to avail myself of such an opportunity to meet the body of collaborators. However, I shall look forward to see an account of the discussions, etc., made at the Convention, through the *American Annals*.

You will probably receive this, after the proceedings are over, but should you

receive our communications in time, please express my fraternal brotherhood for the success of the Convention, and the welfare of the deaf and dumb. Believe me to be, dear sir,

Yours very truly,

F. J. ROSE.

STOCKHOLM, SWEDEN, June 9, 1890.

MESSEURS. PEET AND BRAINERD :—I am very grateful for the invitation to your convention, and I should be very happy if I could be able to profit by it. I do not know yet if I can go, but I will tell you how I should like to arrange my journey.

I should start from Malmo, Goteborg or Kopenhagen, for instance, on a Trans-Atlantic steamer about the 18th of July and return from America in the beginning of September, because I wish to remain in your country, at least, one month after having made such a long journey. I should be very much obliged for all sorts of communications and advices concerning the journey, the route and the steamers, as I know myself nothing of such things. Perhaps that the tickets, if the price can be reduced, can not be valid during all the time? I am told that (it is only the second class ticket I could take) a ticket for (2d) second class costing two hundred crowns in our money before the 10th of August must be paid with two hundred fifty crowns after this date, from Malmo to New York with a Bremen Lloyd Steamer. If I once arrive to New York, I am almost sure that a teacher at the Normal College, my friend Miss Emily Connant, will be kind enough and try to procure me cheap and decent lodgings in the city.

My Post Office address from the 15th of June to the 15th of July is Loka, Sweden.

With great esteem,

AMY SEGERSTEDT.

Principal for Tysta Skolan in Stockholm.

DEAR SIR :—I thank you very much for your letter and your kind generous offer. Most unhappily I received it only two days ago, and consequently much too late to be able to profit by it.

Thus I can only now, as before, on a great distance, try to follow the progress of your grand labour and the development the instruction for the deaf and dumb is making in your country. This work, I always will observe with the greatest interest, with true admiration and with the best wishes for you all, who are promoting it so successfully.

Yours truly,

AMY SEGERSTEDT.

CENTRAL NEW YORK INSTITUTION FOR DEAF-MUTES, }
ROME, N. Y., June 18, 1890.

CHAUNCEY N. BRAINERD, *Superintendent*,

New York Institution for Deaf-Mutes, Station "M," New York City.

MY DEAR SIR :—I write to say that seven of our teachers (six males and one female) expect to attend the Twelfth Convention of American Instructors of the Deaf this summer. I regret exceedingly my inability to be present, but as I expect to sail for England July 2d, I doubt if I shall return in time.

Very respectfully yours,

E. B. NELSON, *Principal*.

NEBRASKA INSTITUTE FOR THE DEAF AND DUMB, }
OMAHA, NEBRASKA, August 8, 1890.

DR. ISAAC LEWIS PEET, *Principal*,

New York Institution for the Deaf and Dumb.

DEAR SIR :—I regret that I cannot be with you bodily at the Twelfth Convention, but shall be there in the spirit. I should like to take the old war-horses by

the hand, and make the acquaintance of the new. Circumstances, over which I have no control, prevent my attendance. Please extend to the Convention my most cordial greeting and best wishes.

Very truly yours,

J. A. GILLESPIE.

GENEVA, SWITZERLAND, August 3, 1890.

TO THE CONVENTION OF PRINCIPALS AND TEACHERS OF THE DEAF, New York :

—I regret very much that I am not able to attend the Convention, as I came abroad at close of school in June for a needed change, and to visit European schools for the deaf. Hoping that you may have a very successful Convention, I am

EMMA GARRETT, *Principal*,

Pennsylvania Oral School for the Deaf, Scranton, Pa.

WASHINGTON SCHOOL FOR DEFECTIVE YOUTH, }
VANCOUVER, WASH., August 18, 1890. }

DR. ISAAC LEWIS PEET, New York City, N. Y.

DEAR SIR:—It is with much regret that I must forego the pleasure of being present at the Convention, to be held at your Institution on the 28d inst.

We are enlarging our building, also introducing electric light and steam-heating plants, besides making other improvements, and as the carrying out of the details of a portion of the work is under my direction, it is impossible for me to absent myself for any length of time.

Wishing all in attendance a pleasant and profitable meeting, I am

Very truly yours,

JAS. WATSON, *Director*.

VANCOUVER, WASH., Aug. 19, 1890.

DR. ISAAC LEWIS PEET, *Principal*,

New York Institution for the Deaf and Dumb, New York, N. Y.

DEAR SIR:—I thank you for circulars received relative to the call of the Twelfth Convention of American Instructors of the Deaf, and of the First International Convention in America, but regret to say that I shall be unable to attend, as my physician has advised me, owing to the state of my health, to spend as much of my vacation as possible on this coast. So the Manitoba Institution will not be represented at this gathering.

It may be of interest to members of this convention to note that since their last meeting together, another institution for the education of that class in whom we are mutually interested, has been established on a firm basis in the city of Winnipeg, Province of Manitoba. Although not more than eighteen months old, we occupy a commodious building of white brick, fitted with all modern appliances and conveniences, erected by the Provincial Government for our accommodation. And, sir, it is my pleasure to record that our system of instruction is identical with the one pursued in the institution over which you so ably preside. This to my mind endorses the fact that we are fully abreast of the times in regard to the best method of instruction of the deaf.

You will please convey my compliments to the members in session, and I hope that all in attendance will spend both a pleasant and profitable season at this convention.

Yours truly,

J. C. WATSON,

Principal Manitoba Deaf and Dumb Institution.

UTAH SCHOOL FOR THE DEAF, }
SALT LAKE CITY, UTAH, Aug. 15, 1890. }

DR. I. L. PEET, *Principal*, N. Y. Inst. :

MY DEAR SIR:—I regret my inability to be present at the convention, but the late date makes it impossible for me to attend and get back to my work in time.

I hope the session will be a most profitable one for those who have the pleasure to attend. With kind regards, I am

Very truly yours,

FRANK W. METCALF, *Principal.*

SCHOOL FOR THE DEAF OF NORTH DAKOTA, }
DEVIL'S LAKE, N. D., Aug. 18, 1890. }

PROF. J. L. NOYES, *Supt. Minn. School for the Deaf:*

MY DEAR SIR:—The circular letter announcing the Twelfth Convention, which you kindly sent me, was received.

I would like to avail myself of the advantages which the convention affords to those who are fortunate enough to be able to attend,—advantages that I feel I stand sorely in need of at this time. But the whole work of getting the school started is put almost entirely on me, and the time is so short that I find it impossible to leave my duties here even for a few days. I hope, however, that I may ask, through you, such recognition for this school as the honorable convention may deem proper and fitting. While fully aware of my own incompetence, I yet undertook this work with a wish to succeed and a reliance on a Divine Providence. I trust that my effort so far has been such that I may deserve the friendship, encouragement, advice and guiding help of those whose years of experience have been crowned with success.

Wishing success and God's blessings on the deliberations of the convention,

I am, most respectfully,

A. R. SPEAR.

CHAUTAUQUA, N. Y., August 19, 1890.

I. L. PEET, LL.D.:

DEAR SIR:—Though so near to New York, I have to announce that I cannot come any nearer; so you need not expect to see me at the convention. I had some faint hopes early in the summer that I should have the pleasure of being one of the guests of your Institution; but I find myself compelled to forego the pleasure, which I have put aside in the discharge of my duty to my wife, whose restoration to health we are seeking here in the pure air and on the restful water of this lake.

Please make my kind regards to such of my professional associates as may inquire after me, with my sincere regrets that I cannot share in the proceedings and the delights of their gathering.

Most truly yours,

BENJAMIN TALBOT.

981 FRANKLIN AVENUE, }
COLUMBUS, OHIO, August 21, 1890. }

DR. I. L. PEET:

MY DEAR SIR:—I had fully made up my mind to attend the Twelfth Convention of American Instructors of the Deaf, which meets at your Institution on the 23d inst., but I find at the last moment that the pleasure of doing so is denied me by circumstances unforeseen. I can only be with you, therefore, in the spirit; however, I shall look with interest in the forthcoming proceedings of the convention. I would suggest that the next convention be held in Chicago, in 1893. I think suitable arrangements could be made for that purpose, and also that it be international in character.

Sincerely trusting that the Twelfth Convention will be the largest and most profitable, to its members and to the profession in general, of all its predecessors, I remain,

Very truly yours,

A. B. GREENER.

921 THIRD ST., COUNCIL BLUFFS, IA., Aug. 19, 1890.

HON. C. N. BRAINERD :

DEAR SIR :—I shall not be able to be at the Convention. I very much regret this, as nothing would give me greater pleasure than meeting my co-workers, and enjoying the benefits the Convention will give all.

Wishing you a pleasant and a successful meeting, I am

Very truly yours,

F. C. HOLLOWAY.

OSCEOLA, IA., August 19, 1890.

CHAIRMAN OF THE CONVENTION, New York City, N. Y. :

DEAR SIR :—I regret that it will be impossible for me to attend the Convention, as I intended to, owing to sickness in my family. Confident that an enthusiastic and profitable time will be had, I am

Yours truly,

C. SPRUIT.

Iowa Inst. for the Education of the Deaf and Dumb, Council Bluffs, Ia.

[TELEGRAM.]

POINT CHATTAUGUA, N. Y., August 26, 1890.

DR. GRAHAM BELL, care I. L. PEET,

Institution for the Deaf and Dumb, Washington Heights, N. Y.:

Please present my regrets to president of convention ; prior engagement detain me. Have expressed a paper to you.

J. C. GORDON.

THE PRESIDENT: I have been asked whether there would be a session this evening. I suppose that the Committee on the Order of Business has not, as yet, made out any programme. I would refer that question to Dr. Peet, who is the Chairman of the Local Committee of Arrangements.

DR. PEET: No arrangements have been made for a session this evening, because it seemed to me as if we should be working in the dark until the Committee on Business had formulated some plan. Perhaps Dr. G. O. Fay of that Committee might make a suggestion in connection with that matter. We shall be glad to place this room at the service of the convention for this evening.

THE PRESIDENT: I desire to announce that the Rev. Dr. Gallaudet will deliver a sermon with regard to church work among deaf-mutes at St. Ann's Church, to-morrow morning, at eleven o'clock. The Church is on Eighteenth St., just off Fifth Avenue.

REV. DR. GALLAUDET: I wish to say that the sermon will be interpreted by the Rev. Mr. Chamberlain for the benefit of the deaf-mutes. To-morrow is what is called the Twelfth Sunday after Trinity. The gospel of the day, which will be read throughout the whole world using the Book of Common Prayer, recites the miracle of the curing of the deaf. In the afternoon, we have arranged for a communion service for deaf-mutes at half past three o'clock. This will be an interesting service, particularly for the deaf-mutes. Of course, we understand that there is something to be discussed here, but my own duties will re-

quire me to be at my church. We have arranged this service for the benefit of those attending this convention. The entire service will be interpreted for those who may be there.

DR. PEET: In the afternoon at half past two o'clock to-morrow, we should be glad to have the convention assemble here and be present at a short sign service such as we are accustomed to conduct on the Sabbath. It consists of the Lord's Prayer by the whole School, and here it would be by the whole convention in concert; of the singing or rather signing of hymns by one of the institution choirs; of the reading of the gospel of the day; of a prayer; of a short sermon; of another hymn; and of the benediction. We shall probably ask one of the deaf-mute clergymen who are present to give a short sermon, and as it represents one feature in our work, I will conduct this portion of the exercises. After that, there will be time given for a discussion of questions on the religious and moral education of the deaf and dumb which may be propounded by the Business Committee. I should be pleased if the convention would accept that order for to-morrow afternoon, commencing with the service I have stated and then following out the wishes of the committee.

MR. A. L. E. CROUTER, of Pennsylvania: I move that a Committee on Necrology be appointed.

Motion seconded.

THE PRESIDENT: I am sorry to say that on each of these occasions it is necessary to appoint such a committee as this. Since the last gathering in California, there have been some who are very near and dear to us, and to the profession, who have passed away.

Motion carried.

The President then appointed the following as the Committee on Necrology: A. L. E. Crouter, Pennsylvania., Chairman; D. R. Coleman, Ontario; J. L. Smith, Minnesota; Z. F. Westervelt, Rochester, N. Y.; Miss K. H. Fish, Maryland.

DR. NOYES: I would like to ask you to appoint some one in place of Mr. Smith. His duties require that he remain at home, and he is unable to be present at the convention.

The President then named W. M. Chamberlain, of Rome, N. Y., in place of Mr. Smith.

MR. ELY: Dr. G. O. Fay is here, and probably he will have something now to present to us for work this evening.

DR. G. O. Fay: Perhaps it will hardly be expected that a discussion of teaching will be best for a Saturday night. Perhaps we all would rather start with something like that on Monday morning, but we are here, and I see no reason why we should not make use of all of our time. We have material in abundance, and I do not know that we can spend our time any better than gathering here at a suitable time this evening, and listening to prepared addresses by several of those in the convention, on subjects that are very closely connected with our work. I would suggest, if it is the pleasure of the convention, that we arrange our time that way, beginning at whatever time we may agree upon, and continuing for an hour or two. The papers, which will be read, are open to inquiry, suggestion and criticism, and

anything that any member has to say, will be listened to. I have here a paper upon the standard of teachers by a gentleman from New Jersey. I have also a series of papers upon the teaching of language as practiced in institutions by teachers themselves. I have a paper upon oral instruction, which contains many things useful and suggestive. It is just according to our patience as to how many of these papers we shall read this evening. I certainly think there should be an evening session.

Mr. D. R. TILLINGHAST : I think that it is the general opinion of the convention that it is best not to have any meeting this evening, in order that we may have a friendly conversation with each other. Perhaps there are others, who think the same way on this subject. After that is done, I think we shall be in better shape to continue our business.

Mr. S. T. WALKER, of Kansas : I am satisfied that there is a great amount of material here, and we had better get at it right away. I move that we have an evening session.

Motion carried.

The convention then adjourned until half past seven.

EVENING SESSION, SATURDAY, AUGUST 23.

THE PRESIDENT : The time for the meeting of this convention this evening has come and gone. In consequence of some matters that were necessary to be attended to in the Assembly room, we were unable to get together at the time appointed, half-past seven o'clock. The interpreter for the first hour will be Dr. E. A. Fay, of Washington. The order of business will now be explained to you by the Chairman of the Committee of Business.

DR. G. O. FAY, in charge of the Normal Sessions of the Convention, then said : This evening it is proposed to have read the following papers :

1. "The Standard of Teachers," by Weston Jenkins, of New Jersey.
2. "The Use of Newspapers in the School Rooms," by Willis Hubbard, of Michigan.
3. "Should Oral Pupils be taught in Sign Classes," by W. E. Taylor, of Nebraska.
4. "Aural Education," by F. D. Clarke, of Arkansas, and E. H. Currier, of New York.
5. "Electrical Transmission," by S. T. Walker, of Kansas, and A. Graham Bell, of Washington, D. C.

The paper "The Standard of Teachers" was then read by Mr. Jenkins.

THE STANDARD OF TEACHERS.

There is no point upon which the members of this convention will agree with more cordiality than upon this : that it is desirable to secure for the work of instructing the deaf, men and women of the highest possible character, talents and attainments. What the teacher of the

deaf should be in these and in other respects, has often been set forth with such justness of thought and such clearness of expression, as to leave no room for further exposition, nor opportunity for successful contradiction. The idea of the perfect teacher exists as a well-defined species—unfortunately the men and women who in the real world correspond to this idea, are yet to be born, or at all events, they do not, under present circumstances, gravitate naturally to our schools in sufficient number to fill the places.

Having ascertained clearly enough what the ideal standard for teachers should be, the practical question next at hand is : How can we get teachers who will, as nearly as possible, come up to this standard ?

The condition which in this materialistic age and country will occur first to every one is the payment of adequate salaries. "Naught goes for naught ;" "The laborer is worthy of his hire ;" or in more homely and more pithy phrase—"Poor pay, poor preach !" It is, of course, impossible to get and to keep first-rate teachers without paying them liberal salaries. But it is a great mistake to suppose that the scale of salaries in any calling must furnish a trustworthy criterion of the worth of the persons receiving them. Were such the case, we should look to the occupants of our municipal benches rather than to the Justices of the United States Supreme Court for the most shining examples of judicial learning, dignity and impartiality. Good salaries alone will not secure good teachers. On the other hand, the higher incomes and the possibilities of acquiring fame and fortune which are offered in other professions and in business pursuits will not, necessarily, draw away all the first-class men and women from the profession of teaching. There are temperaments to which the intense activities, the fierce competition, even the hazards of business offer a field of exertion congenial to their nature. There are other temperaments—often found in connection with a high order of ability—which prefer such occupations as, while assuring a comfortable support, give leisure for study, and occupy the mind with objects which in themselves are of interest. The clerical profession, the army and navy, and the ranks of all scientific pursuits contain many men fully the peers of those who succeed in the more gainful occupations.

Closely allied to the question of salary is that of tenure of office.

Except for symmetry in the treatment of the subject, it is needless to say that the permanency of a teacher's employment should be determined solely by his or her efficiency—using the term in its broadest sense. No personal likes or dislikes on the part of the Principal or of the Board, no wish to secure a coveted position for some friend or relative—above all, no consideration of political expediency should be allowed to enter into the question. It is not necessary before this audience to give the reasons why it is that, in a school governed by motives such as these, good teachers can not be got and held—good teaching can not flourish. We know that schools so managed have been,—like Dante at a certain point in his infernal journey, we "look on them and pass."

The application of efficiency as the sole test in the retention of teachers results, very pleasantly to all concerned, in the continued employment of capable persons, but it involves as an occasional duty the

most unpleasant task that can be laid on the head of the school—the discharge of an estimable employe, to whom the situation may be the only apparent means of support, but who, though not, from indolence or negligence, yet fails to teach successfully. In such cases, I am clearly of the opinion that the Principal's judgment should be accepted as final by the Board, and that he ought to exercise it so as to terminate the relation of the unsuccessful teacher to his school.

It is a matter of course that the method of bringing about this end should be such as to afford the one who is to leave every fair opportunity of securing other employment, and as to avoid the appearance of discourtesy, and still more, the casting of any slur, or the expression of personal ill-will.

The teaching of the deaf may, again, be made more attractive to the highly cultivated men and women whom we wish to secure for the work, by enforcing the view that it is a field for original work of great importance.

The expansion of liberal studies into so many new fields, and especially the increase of the higher education among women—the teaching sex—affords an opportunity for raising our work to a higher plane. Suppose an institution to have among its instructors a university graduate of Pedagogy, who has, perhaps, taken a course in the study of Physiological Psychology; another who has taken a technical course, and who brings his knowledge of natural science and of handicrafts to bear on the knowledge he will acquire of the mental habits and bodily aptitudes of his pupils; another who has studied thoroughly the treatment of young children, while all the teachers have had a thorough course of mental training, and have the hunger for knowledge which characterizes the true teacher.

Is it not evident that every teacher in that school would be led on to study and research in which those engaged would find absorbing interest, and by which their standing would be raised to a high level, while great good to the cause of knowledge would be sure to result? But, without waiting till teachers so qualified can be secured, those who are now at work in our institutions, can, by using such means as are at hand or may be furnished, enrich their teaching and raise themselves as they raise the quality of their work. Every rightly conducted school will furnish the needed books and material for study and experiment, and it would be advisable, perhaps, that the expenses of a special course of study, in the line of a teacher's work, should be, in some cases, borne by the school—unless, indeed, the salaries paid be sufficient to meet such extra expenses. The teacher who is ambitious to raise the standing of the profession, will not regard the long vacations solely as seasons of relaxation and amusement, but will try to use the time so as to prepare for better work during the coming year.

The results of such study and experiment as may be carried on in a school should be fully exchanged, and to that end teachers' meetings are an important means, but the more informal interchange of ideas in daily intercourse is at least equally fruitful.

Lastly, it lies with ourselves to dignify and elevate our profession by maintaining the highest standard of character and conduct. So far as regards mere outward respectability, we are, of course, forced upon a teacher. He must be free from all offence in his

domestic relations and from violations of common honesty, in order to retain his position. These restraints tend to make teaching a respectable occupation, but something more is needed to ennoble it as a liberal profession. The soul that is "content to dwell in decencies forever" is not a noble or a gentle spirit.

The army officer is justly proud of his profession for the reason that the penalty of dishonorable dismissal provided by Army Regulations for "conduct unbecoming an officer and gentleman" is supplemented by an *esprit de corps*, which demands absolute perfection in those lines of conduct which are governed by the sense of military honor. The clergy retain the great influence and respect which attach to this profession largely by the point of honor which marks as an unworthy priest, the one who hesitates to incur discomfort, fatigue or danger in bearing spiritual relief where it may be needed. A similar obligation to render his services in the face of these obstacles, and often without the prospect of reward, ennobles the calling of the physician. Does not the teacher's profession call for as high a standard of character as any other?

Ought we not to look among our own associates, if any where, for crystalline truthfulness, for scrupulous honor in all money dealings, for an elevation of mind, which raises above petty scandal, envy and malice, for readiness to work and to make sacrifices for those who need our help, for that sensitiveness "which feels a stain like a wound?"

The "plain living" which our circumstances enforce, can be dignified by the "high thinking," and yet more by the high conduct to which our work invites. If we conceive our work as the mere drilling of the rudiments of learning into dull heads for a given number of hours daily, we can hardly hope that men and women capable of higher things will enter our field.

But let us rather think of the exacting demands which our calling makes on the intellect and on the heart of those who would reach the measure of the perfect teacher; let us think in how special a sense we have the opportunity of building the character of our pupils—that which is the ultimate aim of all education worthy of the name, and we shall see that no career can hold up before its followers a more exalted ideal.

We should have about teaching, the same feeling which Klesmer, in *Middlemarch*, expresses in regard to his art, when, in reply to the smug Philistine who complimented him on having too much ability to be a mere musician, he retorted: "No man has too much ability to be a mere musician—most men have too little."

To sum up, if my views are correct, we may hope to see the standard of teaching raised, in part by increased liberality and justice in the treatment by others of those who enter the profession, but still more by the setting up of a lofty standard of work and character among ourselves and by a higher appreciation of the result to which our labors tend.

THE CHAIRMAN: I would desire to say for the benefit of all that the acoustic properties of this room are such that it is desirable that those who read papers or discuss them will speak loudly, and that there be perfect quiet during the proceedings. Shall the convention

discuss this paper, or wait until the others have been read? There are several other papers to be read this evening, and the question is whether it would be best to discuss each paper immediately after it is read, or wait until they have all been read.

MR. S. G. DAVIDSON, of Pennsylvania: I think it is far better to have the discussion on this paper now, because if it is laid over, the contents of it will be forgotten, and I move that the discussion on this paper be now proceeded with.

Motion carried.

MR. DAVIDSON: I have followed the reading of Mr. Jenkins' paper with much interest. It is upon the teacher more than upon the method that success in our work depends, and certainly there should be some standard by which to gauge the fitness of the men and women employed in our schools for the positions they occupy. But it is not alone the character and ability of the teacher that determines his effectiveness. The relations existing between him and the institution, as represented by its Board of Directors or its Principal, has much to do with fixing his value as an instructor. Those schools in which the teachers are accorded the proper measure of consideration and courtesy due them as ladies and gentlemen of intelligence and refinement, where no attempt is ever made "to take advantage," and where scrupulous justice and impartiality is the rule, will attract the best teachers and the best service out of these teachers.

In this connection I would call the attention of the meeting to the discriminations made in many of our schools between deaf and hearing teachers. There are in attendance at this convention, deaf men and women who stand, as regards intelligence, education and success in their work, on a level with any hearing teacher employed in the schools with which they are connected, and yet who, merely because of their deafness, receive little more than half the salary paid their hearing associates. This is a blot upon the fair name of our profession, which every one connected with it must desire to see wiped out, for whatever reflects on the character of our schools, reflects also upon the characters of those connected with them. I am not one of those who think our schools wilfully do wrong in this matter. They are merely following a custom that was established at a time when the abilities of the deaf had not been so well demonstrated, and their value as teachers was not so widely recognized as it is to-day. Nor do I desire to see the deaf receive preferment without regard to their ability. If they cannot do good work, don't employ them. It is poor charity that sacrifices the improvement of hundreds of deaf children in order to provide a living for one deaf man. But, when they can do good work—as many have proved they can—grant them, as a matter of justice, not of charity, the same opportunities and the same consideration, and pay them the same salaries as hearing teachers. Where this is done you will find they show more enthusiasm in their work. You cannot expect a man who has upon him the stigma of a smaller salary than his associates, and, as sometimes the case, if reports are true, of contentment in authority, to do as well as one whose

for, and who is permitted to retain his self respect and respect for his superiors.

It cannot be denied that there are some deaf teachers in the schools, who should not be there. Their presence is unfortunate in more ways than one. It lowers the standard of teaching and the standard of teachers, and creates a prejudice which unjustly forces upon the more capable deaf men and women a continual struggle in order to retain any standing in the profession. I think it would be well if more care were exercised in granting recommendations, especially as regards deaf-mutes. Some who are notoriously unfit for the positions they hold in our schools, secured them through the influence of men who stand high among us. I was recently told of a young man applying for a teachership in a western school, who showed recommendations signed by two of the most prominent members of the profession. The principal, from past experience, had lost faith in such testimonials, and he asked the applicant what other evidence he could give of his fitness for the work. He replied that he was a graduate of that school and of the National College. Even this was not quite satisfactory, and he then offered to teach for nothing but his board. To the honor of the principal be it said that this settled the young man's goose, and he did not get the place. Are there any schools where the last recommendation would be more highly regarded? I hope not, and I think that if any, for the sake of maintaining the dignity of the profession, our directors, principals, and teachers—both deaf and hearing—should unite to exclude such men from its ranks.

Mrs. BALIS, of Western Pennsylvania: I, too, would like to say a few words. I have no favors to ask of any one here, and am therefore more free to speak plainly upon the subject from the standpoint of the deaf; I am not at present a regularly employed teacher, but I have been. In many years of intercourse with the deaf, of whom I have met several hundred, I have learned much about them and their employments. I have in my possession a list of fifty-four occupations pursued by the deaf, and in every one of these, excepting teaching, the deaf receive the same salaries and wages as those who hear; why is it thus?

Surely the deaf would not be given employment in our Institutions, unless qualified for their positions, and therefore they should receive the same salaries, but in the majority of instances they do not.

In the Institutions I have visited, I have observed, that where deaf teachers are employed there is a marked improvement in the pupils over those of schools where no deaf persons act as instructors, and am of the opinion that the influence and example of the educated deaf employed in our schools is far-reaching and of great importance.

I have been told that the salary question is governed by supply and demand. That may be; but may I ask why it is, when a choice is to be made between a good deaf teacher and a poor hearing one, it seems almost invariably to fall to the hearing person. Let me tell you that it is generally looked upon as a stepping stone to other employments, as a temporary means of livelihood, by many who hear. They have not the least interest in the deaf as a class; if they can only do the work well enough to keep their places and draw their salaries, they are satis-

Now it is rare that deaf persons leave the profession, and they enter it with the intention of making it their life work. They have the interests of the deaf at heart, they devote their time and talents to the welfare of the children under them.

That there are poor teachers who are deaf, I grant, and that some of the best of the friends of the deaf are among those who hear, is true.

You call us clannish; may I ask why we should not be? I have been placed in a very trying position by the thoughtlessness of the hearing, some of whom seem seldom to hesitate to interrupt a conversation between a deaf and hearing person; why should we not be clannish, if we find the pleasant companionship we desire among those who are also deaf. There is a sharp line drawn between the two, and I am sorry to say that even here we are apt to form into groups, the hearing with the hearing and the deaf with the deaf. It should not be so.

I believe the trouble originates in the schoolroom. Rarely do we find a deaf child who comes to us uneducated, afraid to participate in a free intercourse with the hearing. They see no difference between themselves and their hearing friends until their education begins, and then develops a shrinking from those who hear. I believe it is all owing to the ridicule to which they are thoughtlessly exposed by their teachers. I confess I have found it hard to refrain from ridiculing some of the mistakes they make. The more intelligent the persons the more sensitive they are to such treatment; the same may be said of the discrimination made between the deaf and hearing teachers, the higher the teachers' educations the worse they feel about the salary question. Still I will be candid and admit they are, in a great measure, responsible for the present state of affairs. I know many of them agree with me, and I wish they would express their views here. If I have said anything to offend those present, I am sorry, but the subject has been in my mind for some time, and it seemed as if the matter should be frankly discussed.

REV. JOB TURNER, of Virginia: My old teacher, who taught for four years, an excellent teacher, gave the pupils very short lessons to study. The pupils often wanted to have longer lessons, and said that they could take longer lessons, but the good teacher said: "No, I know what is right." And the pupils and the other teachers would laugh at these pupils, because they had such short lessons. The next morning, when the class came to write their lessons on the blackboard, the teacher came in to look at their lessons and speak approvingly of their work, but he told the pupils that they did not know the lessons as well as they thought they did. In the lesson was the use of the expression "not only, but also"—and the pupil would have a clear understanding of it. If the pupil had too long a lesson, he would become confused and would have no clear understanding of the subject. The frequent repetition of much reading gives language. To have a good effect, you must give short lessons.

MR. LLOYD, of New Jersey: I believe that nearly all the superintendents and principals here assembled are willing and desirous to pay deaf teachers and hearing teachers the same grade alike, but they cannot. The power is in the hands of the trustees, but in the hands of the trustees they refuse to

pay deaf teachers as much as hearing teachers, even if the principal earnestly recommend it. If this convention or any other can devise a way of bringing Boards of Trustees around to their chief subordinate's way of thinking in this matter, then deaf teachers will be fairly paid.

DR. PEET: Mr. Jenkins gave utterance to some excellent thoughts on the subject of the character of the teacher. The ideal he gave of the teacher, makes every one feel that to be a teacher is to hold an honorable position. For myself, I think that there is no position equal to it in dignity and in usefulness; and to be a teacher should always be the same thing in the opinion of every one, as to be a man who is to be respected, to be honored and to be trusted. Professor Jenkins hoped that every teacher connected with the instruction of the deaf would always have that high ideal inspiring him or her. I hope that all of us have it. Every man must feel that his character and position depend upon himself, and upon the help he receives from above. At the same time, I believe that every good teacher should be appreciated, and I sympathize most fully with the thoughts that have been brought out by those of our deaf friends, who have spoken on the subject of compensation; for I believe that every person should be paid according to his ability. But I do not believe in making distinctions, that is any great distinctions, between individuals. It is very difficult to settle these matters. One teacher may be better in one respect, and another teacher may be better in another respect, and each contributes valuable assistance. One man has a peculiar talent, another an opposite talent, and brought together in one school each is better from having the assistance of the other. I believe, in reference to the matter of compensation, in having certain standards, and that every teacher on the same standard should be paid alike. I do not believe in paying teachers as you would clerks, according to the amount of value the employer gets from him individually, but I believe in putting all teachers on a certain standard and that standard should have one price. Whether the teacher is a hearing person or a deaf-mute, should make no difference. You may have perhaps several classes of teachers that you pay differently, but all those in the same class should be paid alike. It seems to me that we have all struck the key note, in this the first of our discussions.

DR. GILLET: I have but few words to say, and I can speak quite as well here as from the platform. That there are inequalities in the salaries paid to different teachers, everybody knows and no one will deny; why these inequalities exist is another question. There are a great many conditions existing in society that we would gladly have different than they are. There is, for instance, the question of the compensation of females, as compared with males. A question just as important as the question of the compensation of deaf-mute teachers as compared with the compensation of those who hear. If I employ a woman in my printing office, I pay her the same as I pay a man for the same work, and that is right. If I employ a deaf-mute in my printing office, I pay him the same salary as a man who hears and talks, and that is right. But in the business of teaching inequalities exist. Why they exist is one question, how they may be rectified is another. I am satisfied that all superintendents, and most of the

Boards of Trustees, if they could be governed by their wishes and their impulses in the matter, would gladly pay men and women, and deaf and hearing persons, precisely the same for the same service. But neither the trustees nor the superintendents are responsible for the state of facts as they exist at this time in this particular. Society is undergoing a change with reference to the comparative compensation of men and women, but much more slowly than I would have it come about. I trust the time will come when there will be a great change in our profession with reference to the compensation of deaf-mutes and speaking persons. But, Mr. Chairman, let it be understood by our deaf friends that the law of supply and demand has something to do in this matter, as well as in others. If a graduate from Harvard or Yale or Cornell or De Pauw, or any first class college, is invited to enter the field of deaf-mute teaching, his first inquiry will be, what is the prospect of support in this profession? what compensation shall I receive? Whether he enters upon it or not depends very largely upon what the compensation will be. But when deaf-mutes apply for positions, the question of compensation is never presented. In my experience with them, it is simply a question of whether they can get a situation at any compensation. Now, my belief is, Mr. Chairman, that there should be in every institution gentlemen who hear and gentlemen who are deaf, and ladies who hear and ladies who are deaf. The most powerful influence that I can see to correct this wrong, will be for the deaf themselves to say: "We will enter into the service for such and such compensation, for no less." I believe that the power of correction is more in the hands of the deaf themselves than it is in the hands of superintendents or of trustees. The trustees of these institutions are practical business men, and look at this as they do all practical business questions, and are governed largely by the question of supply and demand. Hence I think no one can do more to assist superintendents in rectifying the inequality complained of, than our deaf friends themselves. I hope they will take this statement clearly to mind. I repeat that no one, in my opinion, can do more to assist the superintendents to bring about the equality which they desire in this matter of compensation, than our deaf brethren themselves.

I speak on this subject, Mr. President, with much interest, and out of a large experience. Having been a superintendent for thirty-four years, and a trustee for twenty years, I have often heard it discussed as a practical question by gentlemen who were governed by practical, rather than sentimental considerations. In such discussions the question is likely to resolve itself into one, whether it is better to advance the pay of the deaf, or reduce the pay of those who hear. If the latter policy is adopted no advantage accrues to the deaf, and the professions, will soon have no first-class hearing and speaking teachers. Most Boards of Trustees are impressed with the conviction that some hearing teachers are a necessity for the perfect working of their Institutions, and pay such salaries as will command their services, just as they do in the case of deaf teachers.

DR. G. O. FAY : I wish to add a word to this discussion, to say that in the Ohio Institution there is not now, and for twenty years past there has been no distinction in salaries between deaf and hearing

teachers as such. The institution has three departments. The first four years of the course constitute the primary department, the next three years the grammar department, and the last three years the academic department. Each department has its own grades in salaries, one set of grades for male teachers and another for female teachers. It is not said to candidates for employment or promotion: "Can you hear? or, Are you deaf?" but "How well can you do the work to be done in the primary, grammar, or academic departments?" The mere question of hearing or speaking is not alluded to or recognized. The official question is simply: "Can you do the work?" There has been no preliminary distinction in that Institution among teachers for twenty years based merely upon the possession or the absence of hearing.

The undoubted natural defect of deafness and the undoubted disadvantage of dumbness, or inability to speak, mentally and socially are not insuperable difficulties in the general make-up of a teacher's qualifications, and need not be made the pronounced ground for an official discount at the outset.

DR. NOYES: I wish to add a word on this quite important subject. I think that there are a few points in the paper, which was presented, that deserve to be emphasized, and to be brought out before this convention in bright and glowing light for the edification and guidance of some of our young friends here. There are some few points in the workings of an institution where a hearing man is actually of more value to the institution than it is possible for a totally deaf man to be. The public demand, and parents will insist that their children, who are deaf, shall not be left night and day, day in and day out, to the entire instruction of those who cannot hear. There have been school rooms, which if necessary I can point to, where the teacher had been for years totally deaf and his pupils were allowed by reason of his infirmity, not because of his desire or intention, but by reason of his infirmity, to contract habits by the utterance of disagreeable noises, and to such an extent, that the parents have insisted that this peculiar habit must be corrected, or the child must leave the institution. The simple fact was that the teacher was not conscious that the habits were being contracted, and the parents were sadly disappointed when their children visited home, and the issue came at last that the school must provide a teacher who could hear, one who would correct these bad habits. Now, our friends who are deaf, I mean the teachers, are doing a great work in their way, and I wish to say right here, as an evidence of it, that the highest salary that has ever been paid in the Minnesota Institution within the last twenty-five years has been paid to a man who could not hear a sound. And that has been done not simply because he was deaf, but because he was a man of that cast of mind, and of such ability that he was deserving of it, and the same is true to-day. Now, then, I say it is simply because of his ability, and not because he is deaf, not because he is engaged in a work of charity, or anything of that sort. But some of these persons realize just as well and just as truly, I think, as any one, that there are some demands in institutions for the deaf that cannot be met by the deaf, and they are matters of some importance too. Now, then, in regard to applications

for positions. I call to mind several that I have in my desk from teachers who have all their faculties, and from teachers who are deaf graduates of college. An exhibition of these letters would not be creditable to some of them. I could show defects in construction, defects in spelling, defects in the idioms of the English language, both from the deaf and the speaking and hearing applicants. One bright young lady, a graduate from an institution, with all her faculties, signs herself "Yours respectively," and writes the preposition to "too." Now let those of our friends who are in school and who are in college—I am speaking now of my deaf friends—let them bear in mind one other thing, there are two elements that are highly important in this work of education, one is mental force and keenness, and the other is of character that will stamp itself upon the minds of the children, so that it will stand the test of life. What are these institutions for? What does this State pay these millions for? What good is to be accomplished? Is it to make bright men or drones? It is to make good citizens, good fathers, husbands and wives, men and women who will be able to bear the temptations, the toils and struggles of life. It is not to make men or women who will in the private walks of life act as though it was very smart to cheat and deceive their friends and fellow men; but it is for the teachers to stamp upon the children those stern, solid, principles which will bear the test of life. Teach them to be honest, square and upright, and every time they will respond honest and true. We want teachers that appreciate the position that they are in, that appreciate what the State has done; what the fathers and mothers want; and what God above demands of us. I want to relate to you one little incident that made more impression on me, when I was a teacher, than any other thing that has ever occurred to me as a teacher from that time to the present. The first class that I taught was in Philadelphia many years ago. One day a Scotch woman came to see her boy and her boy's teacher, and she told me that every day she went into her dark closet and she held out her hands and prayed for Willie and Willie's teacher. I never forgot that. If that was true of that mother and that boy, how many others do likewise? Every one of you, whoever you may be, young or old, remember that there are mothers in Israel that are doing that same sort of thing for you, perhaps daily. The mother wants a good boy, she wants an honest boy, she wants a truthful boy, she wants a God-fearing boy, and I say that it is our business to see to it, by precept and example, and by that silent, unconscious influence that goes out from the teacher to the pupil, that her boy is such an one. If we thus conscientiously and faithfully do our duty, by-and-by the Board of Directors will discover, by-and-by the superintendent will discover, that the institution cannot spare such a teacher, and then will come to you, not only honor in the institution, but better still, you will be great in the eyes of Him who smiles on all that is right and true. Try so to act as teachers and to leave such an impression that when you are gone, the child will remember you, and then God will bless you for the good work you have done, and for the example you have set. Keep up the character of the teachers, and you will bring up the pupils to a better standard. Begin at the top and you will reach down to the bottom. That is what we want. We want inspiration, and we want an inspiration so

great that every one looking forward to the life of a teacher will catch that inspiration, and then it will be felt, all throughout the land, in our schools.

MR. TILLINGHAST : I dislike to prolong the discussion as the patience of this audience seems to be about exhausted, but justice to the deaf teachers as well as to the deaf pupils requires that I should say a few words.

If a principal should compare me with a hearing teacher, as a general thing, I should suffer. But I insist that he should look at my work and that of the hearing teacher. Let a deaf and a hearing teacher keep their classes for several years, and then step aside and let the principal examine both the classes thoroughly. He would often find that the deaf teacher did better work. I have seen young pupils better taught by deaf instructors than by hearing ones, but a comparison of the attainments of both would have made any Board of Directors believe the latter were superior. The reason why deaf teachers can do better work is their thorough knowledge of deaf children, and their experience, peculiar to the deaf only, in overcoming numberless difficulties in the study of language.

The deaf teacher may be compared to a man who, having crossed barefoot a field of briars, and consequently suffered from them, is much fitter to guide a party of barefoot children through that field without causing them to suffer much from thorns than one who, always protected by shoes, knows nothing of the briars from experience.

I know of a Board of Directors not a thousand miles from here who objected to deaf teachers on the ground that, being incapable of hearing spoken language, they could not improve their knowledge of language. They forgot that the world is full of newspapers, magazines and books.

I say that deaf teachers ought not to be compared with hearing ones, but the work of the former with that of the latter.

MR. A. JOHNSON, of Malone, N. Y. : The last speaker said he disliked to have any more of this discussion ; he said nothing, and I am afraid the deaf people will think he can't talk. I honor Dr. Peet a great deal for the remarks which he has made. People can go out into the world and enter other professions, and other lines of work, and make more money than people who are teaching. But there is a great deal of honor here, and it is an honorable position to be a teacher. I feel that both classes of teachers, deaf and hearing teachers, should receive the same amount of compensation. Honor is not money, however pleasant it may be to feel that you are occupying an honorable position in being a teacher. I hardly believe that a deaf person can equal the value of a hearing person on account of his infirmity. There are a great many things that a deaf person is deprived of that a hearing person is not deprived of. If you want to become equal to the hearing persons, then pray for your hearing. The founders of these institutions have given us a great legacy, and we should preserve it and keep it sacred. We owe a great deal to those who hear.

MR. J. W. SWILER, of Wisconsin : If we go on at this rate we shall not adjourn this convention till December. I would suggest that it is

best to stop this discussion here. There may be other interesting subjects in the other papers to be presented.

THE PRESIDENT : I am only the servant of this convention and I am ready to carry out their wishes if they will make them known. I would suggest to the Executive or Business Committee that a certain time should be fixed for the discussion of each paper, and that time of course could be extended by the unanimous vote of the convention. I am satisfied from the discussion which has taken place this evening, that if we are going through all these papers some limit must be placed upon the discussions. Of course, this is a difficult thing to deal with, and it may look as though the chair were interfering with the freedom of discussion, but I simply desire to get at the wishes of the convention in this matter.

DR. G. O. FAY : There are some forty papers, and there certainly must be some limit to the discussion if we expect to get through all of them.

MR. J. W. SWILER : The statement of Dr. Fay does not quite agree with the suggestion I was about to propose. It is now past the hour of nine o'clock, and it would seem to me to be a great injustice to the author of the paper which is now about to be presented to have it read at this late hour. I hardly think it fair that this paper should be brought before us at this hour of the night when the hour of adjournment has almost arrived. If there is a disposition to discuss every paper that comes before us, my suggestion would be to postpone the reading of the next paper until Monday ; and we can now complete the discussion which has been going on this evening. I would move, sir, that the discussion of this question be completed this evening and that the reading of other papers be postponed until Monday morning.

Motion seconded.

MR. C. W. ELY : I hope the motion will not prevail for the reason already assigned by Dr. Fay, that there is so much material in the hands of the committee to be considered. I see no reason why we cannot take up the next paper and then we can adjourn the discussion of it until Monday, if we can find time for it. I, therefore, move as an amendment that the reading of the next paper be now proceeded with.

MR. SWILER : I withdraw my motion.

The reading of the next paper then followed, "The Use of Newspapers," by Mr. Hubbard.

THE NEWSPAPER IN THE SCHOOL-ROOM.

The importance of cultivating in our pupils a habit of reading has been so repeatedly discussed in former conventions, at teachers' meetings, in our periodicals and in the institution press, that further discussion may seem unnecessary. All admit that upon this habit, more than upon anything else, depends the realization of the true teacher's greatest desire—to give his pupils a ready command of language.

Generally the groundwork of instruction in language is fairly started in the school-room, and the teacher is able to express many of his

ideas in simple English after the first three or four years. During that time his mind seems to have been quickened into new life. Through the graphic medium of signs, his teachers and more advanced fellow-pupils have regaled him with stories and descriptions. Like Oliver Twist, he is ever ready for more, and the promise of a story often serves as an incentive to increased diligence. This in my estimation is the proper stage for the teacher to inculcate a most useful lesson of self-dependence. He should impress upon the pupil that most of these entrancing stories are obtained by reading, and that each one should learn to read for himself. The library should be pictured as a mine of useful and interesting information, to which he has a claim in common with others. "Rome was not built in a day;" no more can the reading habit be formed except by slow growth.

A judicious selection of reading matter suited to the mental capacity of the pupil is one of the teacher's most important duties. But this duty does not end with the mere selection. The teacher must, as far as possible, see to it that the pupil *understands* what he reads, and render as much, and *only* as much, assistance as may be needed. The tastes of our pupils differ as to the kind of reading matter they prefer. Some take to story books, some to biography, some to books of travel, some to history and some to fiction. For obvious reasons few, except semi-mutes or exceptionally bright deaf-mutes, have a taste for poetry. Not a few find their greatest pleasure in perusing newspapers, and a reference to this fact brings me to a consideration of my subject.

The newspaper occupies a position in our daily life which we are able to fully realize only when deprived of it for any length of time. All branches of literature are embraced in its original and selected matter, or referred to in the allusions made by the writers. It is the mirror which reflects the daily doings of the civilized world. It gives information in regard to matters on which every well-educated person desires to keep posted. The topics of the day become the subjects of conversation of millions of people. It is not strange, then, that the intelligent deaf-mute should be interested in these topics in common with those with whom he associates. If the deaf are ever to be "restored to society," the restoration will depend, not upon their ability to lisp mechanically a few meaningless sentences, but upon their general intelligence and their ability to keep pace with public opinion.

According to educational journals, the newspaper is now used in the reading classes of some of our public schools with good results. In nearly every school for the deaf, there are files of newspapers kept for the benefit of the pupils, and it is encouraging to note how eagerly they are perused. It is up-hill work for some of them, and they often need the help and encouragement of their teachers. In order to render such assistance to the best advantage, may not the newspaper be brought into the school-room under certain limitations?

In the published report of a recent teachers' meeting in one of our schools, some one said he "rather favored keeping books and papers out of the schoolroom; that it does not look well to see a class all reading in school. How would it appear to visitors?" He was correct under ordinary circumstances; for no pupil should be allowed to neglect his regular schoolroom work to read books or papers. The case is different, however, if the reading is made a regular exercise.

In the Michigan School for the Deaf, for many years, newspaper-reading in the schoolrooms of the more advanced classes has been allowed at stated times—generally the last hour, or an hour and a half of Friday's session. The exercise, which is eagerly anticipated by the pupils, forms a pleasant and yet profitable relaxation after the hard work of the week. The teacher briefly calls the attention of the class to the events of the week to excite their interest—a sort of glance over the bill of fare to whet the intellectual appetite. The papers are then distributed, and the teacher passes around among the pupils, suggesting, questioning and being questioned. Dictionaries are provided, but the teacher must act the part of a "walking encyclopedia." It may be said that there is much objectionable matter in many newspapers, especially in the criminal news, which is given too much in detail. This statement cannot be denied, but the difficulty may, in a measure, be avoided by the teacher's marking the items to be read. If, in spite of this precaution, the eye of the average schoolboy suddenly lights up on seeing the name of John L. Sullivan in another column, or if he manifests an inclination to peruse the accounts of baseball games and the wonderful achievements of Maud S, wherein does he differ from boys who can hear? And is he not, even then, learning more of language than if he depended upon some older pupil for the same information?

A boy in one of my classes, whose school-days were nearly over, not long ago, called my attention to the fact that two whole pages of his paper were devoted to something beyond his comprehension. On examination, I found that the matter consisted of advertisements of tax-sales. I explained, giving him some information in regard to the duty of promptly paying taxes and the consequences of neglecting or refusing to do so. He was deeply interested, and as he will come into the possession of some property on attaining his majority, who can say that he will not be a more prompt taxpayer, and, therefore, a better citizen in consequence of that brief talk.

In my classes, I have made it a practice for each pupil to go to his large slate and write a synopsis of something he has read, and in nearly every instance they have been able to give facts in, at least, fair English. A few are at first rather inclined to commit to memory and reproduce the language, word for word, but as they become more familiar with the practice, they do better; for to give the ideas in their own language, even with some errors in composition, is a most excellent test of their ability to read understandingly.

The good results of this reading in the schoolroom under the direction of the teacher are apparent in the pupils' improvement in language, in their increased fondness for reading, in their conversation and debates, and in the subject-matter of their school-room sentences and essays. It may be added that the constant mention of facts connected with various countries, states and cities, gives additional interest to the study of geography. The habit of reading, once formed, will rarely be given up; consequently, the acquirement of general information and the improvement in language will continue.

It may not be out of place to remark here that the prudent teacher wisely avoids expressing in the school-room any pronounced opinions he may entertain in regard to political questions. As far as possible,

the newspapers of all political parties should be placed on an equal footing. I am sure some of my friends from certain States will agree with me as to the wisdom of such action.

I would have no one infer from my strong belief in the efficacy of newspaper reading by our pupils, that I prefer it in every respect, or that I would not encourage the reading of books as well. I would not exclude any proper reading matter that may suit any individual taste. As different physical constitutions often require different medical treatment for the same disease, and the wise physician adapts his remedies to the case in hand, so should the teacher study the mental tendencies and capacities of his pupils and utilize that which will most surely accomplish the true development of each.

DR. PEET : I would like to make a suggestion in relation to the paper which has just been read. There are, I believe, several papers on the same subject, one I think by Mr. Tillinghast. I think it would be well to postpone the discussion, until they have all been read.

MR. SWILER : I simply want to say that I wish to secure for this subject a proper consideration and discussion. I think the question of the introduction of newspapers into the school-rooms is an important one, and I am desirous that all those interested in this matter shall have a fair opportunity of debating upon it. I am anxious that this paper should receive the consideration which its importance demands.

MR. MOSES : I would make one suggestion. We were discussing all this evening a topic which was not mentioned in the paper which was first read. I would suggest that our President hereafter hold the convention down strictly to the question before it, and if a speaker debate any other question, he shall be called to order.

MR. S. T. WALKER, of Kansas : It has just been stated we have some forty papers to be read, and at the rate we are going to-night, it would take until the end of September to read them all. My objection is that I am required to leave here on next Thursday, and I shall be very sorry indeed, if I am unable to hear all the papers read that have been prepared for this Convention. If we go on as we have to-night and adjourn on next Thursday, then several of the papers will remain unread.

DR. PEET : I have one or two announcements to make in regard to the convention. Those members who have not already registered, will be kind enough to do so as speedily as possible.

The hours for meals will be as follows : Breakfast, 7 to 8:30 ; Dinner, 12 to 1:30 ; Supper, 5:30 to 6:30.

MR. ELY : The Business Committee announces that for to-morrow afternoon, a meeting has been arranged by Dr. Peet, after which there will be a discussion of religious topics. The committee has also arranged that the daily sessions shall begin at nine o'clock, and continue until twelve, resume at two in the afternoon, continue until five, resume at half-past seven, and continue until half-past nine. The morning and evening session will be given to the normal department, and the order of exercises for that department will be announced by Dr. Fay, chairman of that department. The order for Monday afternoon will be as follows : A paper on the Advancement in Methods of Instruction, by Mr. Monroe, of Michigan ; second, The Relation of Sign-Language

to the Education of the Deaf, by Dr. Peet; and third, The Results of College Work, by A. G. Draper, of Washington. Discussion thereon will follow.

DR. G. O. FAY: The subject for the first hour of Monday morning's Normal Session will be: The Teaching of Written Language; a series of nine papers have been presented ranging from the Primary to the Advanced grades. For the second hour, Arithmetic. For the third hour, Technical Articulation.

The Convention then adjourned at 9:45.

SECOND DAY.

SUNDAY AFTERNOON, AUGUST 24.

The Chairman called the convention to order at 2:30 P.M. and called upon Dr. I. L. Peet of New York to conduct the Sunday afternoon service in accordance with the usage of the New York Institution. The order of exercises was as follows:

1. The Lord's Prayer; both in speech and in signs, Dr. Peet leading and the convention following in concert.
2. Hymn, "Just As I Am," rendered in signs by a choir of girls and read, *part passu*, by Dr. Peet.
3. Reading of the First Table of the Law; first by dactylology and words, and then by signs, by Dr. Peet.
4. Prayer in signs and words simultaneously by Dr. Peet.
5. Hymn, "Rock of Ages," rendered in signs by a choir of girls and translated, *part passu*, by Dr. Peet.
6. Sermon, in signs, from the text, St. Matthew V., 8; by D. R. Tillinghast, of North Carolina, and translated, *part passu*, by Dr. Peet.
7. "Te Deum Laudamus;" in signs by W. G. Jones, of New York, and read orally by Dr. Peet.
8. The Doxology; rendered in signs by a choir of girls and translated, *part passu*, by Dr. Peet.
9. Benediction, simultaneously in signs and words, by Dr. Peet.

THE PRESIDENT: I feel that I express the sentiments of every one present when I thank Dr. Peet for his beautiful service. It is many years since I have been here, and it is a great pleasure to witness the grace, beauty and fervor of the services.

As it has been a custom of the convention to devote a part of the Sabbath day to a discussion and description of the methods for moral development employed in the different institutions, I shall call on the principals of the different schools, beginning with Hartford, the oldest institution.

DR. WILLIAMS, of Hartford: At Hartford, from 9 o'clock to 10 o'clock on Sunday morning, the girls are in their study room under the care of a female teacher, and the boys in their study room under the care of a male teacher. This hour is spent in the study of a lesson

given out on Friday afternoon to be recited on Monday morning. Manuscript lessons are prepared for the youngest pupils. The books used for the other grades are, in their order, "The Story of Jesus," printed at the Kentucky Institution for the Deaf, and Foster's two books, "The Story of the Gospel," and "The Story of the Bible." At 11:45 A.M., a service is held in the chapel, lasting one hour. There is a similar service in the afternoon at 2:30. In winter, and in bad weather during the rest of the year, the pupils are gathered in their study rooms from 4 to 5 P.M., to read. There is a library in each of the study rooms and in several of the classrooms. Picture books are supplied for the younger pupils. On Sunday evening the pupils are assembled in the chapel, where a story with a good moral point, or the gist of some good book, is given in signs. By this means the little folks get an idea of what good things are to be found in books, and are encouraged to read for themselves. When not taken to the chapel in this way, the boys and girls assemble in their respective study rooms, and spend their time in reading under the supervision of teachers.

DR. PEET: It is very interesting to know that there is similarity between Hartford and New York in the manner of Sunday observance. A religious discourse, preceded and followed by prayer, is delivered in signs by the gentleman teachers in weekly rotation at half-past eleven in the morning, and a service like the one in which we have just participated is conducted by the Principal at half-past two in the afternoon. During the morning hours, the children of Roman Catholic parents attend mass in a church in the vicinity, and those of members of the Protestant Episcopal Church receive special instruction in another church from Rev. Anson T. Colt, of the Church Mission to Deaf-Mutes. The Catholics also receive weekly lessons from Rev. Alfred Belanger, C.S.V., of the Catholic Mission, in a hall he has provided for the purpose.

Study under the oversight of supervisors is required from nine to eleven in the morning, and special opportunity is given in the evening for the reading of books the pupils have drawn from the library, or for attending a lecture illustrated by the stereopticon. During the intervals of the day not occupied by these exercises and by regular meals, the pupils are permitted to go out of doors and enjoy the sunshine in the decorous manner appropriate to the day. Frequently after the afternoon service, I request the church members to remain, whether they belong to the Roman Catholic, Episcopal, Presbyterian, Methodist, or Baptist denominations—all are considered as Christians—and I talk to them about the influence they should exert. The idea is to give them broad views of Christian life, and teach them all to work together. Many pupils are brought to a knowledge of Christ, and to love Him. We can keep up unsectarian feeling in this way. We are prevented from teaching sectarianism by law, but that is not inconsistent with substantial unity on the great and essential principles upon which a good life depends. Each year, a number of pupils unite with some church, having the consent of their parents, and when they do so, are specially privileged. The lessons studied on Sunday are recited on Monday. The majority of the pupils study as religious lessons the verses of which have been read at daily prayers during the week; the Ten Commandments which have been given in concerted signs; the Ten

Commandments ; and the Lord's Prayer. Peet's Scripture Lessons, by the late Dr. H. P. Peet, and published by the American Tract Society, are used with the younger classes. Teachers should examine it, and see if it is not on the true line of development. The book is largely used by hearing children as well as by deaf-mutes.

DR. WILLIAMS : We used the book for many years at Hartford.

DR. PEET : I am sorry you have stopped.

MR. CROUTER : Sunday work in the Philadelphia School is carried on in a manner somewhat similar to that just described by Dr. Peet. We have Sunday-school in the morning from nine to ten, each teacher being required to take charge of his own class. In the younger classes, the lessons are prepared by the teachers with a special view to meet the condition of their pupils ; in the more advanced classes, the lessons as contained in the International Series are followed. The "Story of the Bible," "First Steps for Little Feet" and the "Picture World," a paper published by the American Sunday School Union, are used with good results.

At 11 A.M., and at 4:30 P.M., there are services in the chapel of the Institution, conducted by the male teachers in the morning, and by the Principal and the chief instructor of the Primary Department in the afternoon. There is an evening study hour from seven to eight, the same as on other evenings.

Children of Roman Catholic parents are permitted to attend mass in the morning, and Sunday-school in the afternoon, returning from both services in time for chapel lecture. The Protestant Episcopal Mission for the Deaf also provides some special instruction for the children of Episcopal parents.

The pupils attending the Oral Department of the Institution have an oral service in the morning, and Sunday-school in the afternoon.

THE PRESIDENT : If any one has any different system, we should like to hear from him.

MR. WESTERVELT : I call upon Miss Yale, of Northampton, to state the procedure in that school.

MISS YALE : At Northampton, the older pupils study a Bible lesson on Saturday evening ; at 9 A.M. Sunday, they have a chapel service. At 10 all go to church. At 2 P.M., Sunday-school is held, in which each teacher teaches her own class. The pupils begin before the close of the first year to study Bible verses. After Sunday School, pupils go to the chapel and read for an hour and a half. The evenings are spent in pupils' parlors in reading and conversation. Pupils attend their own churches, and when they so desire, are prepared by special instruction for church membership.

MR. CHAS. KERNEY, of the Evansville (Ind.) School for the Deaf : Here I do not prepare to throw any light further than to give the results of my experience with the Sunday-school for the deaf in Evansville and my observation of the school of this kind in London, which we visited a few weeks ago.

In Evansville a Sunday-school was organized in the parlors of the Y. M. C. A., in 1886, where, at least, forty-five deaf-mutes attend every Sunday afternoon to enjoy religious services. The Sunday-school is

conducted in an absolutely non-sectarian manner, something like a family society. The members are divided into classes, according to their capacity, and taught by five teachers. Lessons are talked over in a familiar way, for about thirty minutes, until the topic is worked up. As variety is the spice of life, so a method of conducting religious exercises was inaugurated. In order to secure the attention and to increase the interest of the members of all ages and of all denominations, they are obliged to participate in the exercises themselves. They are given something to recite as well as discuss. Also concerts in signs are introduced. This plan has been found to be an exercise of very great interest and profit, as they do not get tired in that steady look of the eye which is necessary, no matter whether the service is short or long. The interest excited by a large number, all participating in common exercises, secures the attention. This anticipation generally occupies about half an hour, while the sermon takes up the other half. This plan impresses upon the deaf a certain amount of religion, faith, and instruction. They are willing to come a great distance in order to enjoy the benefit of these religious exercises. Another Sunday-school was started in the Baptist Church under Miss Emma T. Macy, an assistant instructor of the Evansville School for the Deaf. This Sunday-school consists of little deaf children, who have regularly attended there in the morning.

We visited the deaf-mute church in London a few weeks ago. The attendance was meagre, as only seven out of 3000 deaf-mutes in the metropolis attended, in spite of the wide advertisement that a prominent minister would be present to conduct a service for them. As their services are conducted in spelling with the double-hand alphabet, so the services fail to draw the deaf there, for they seem to derive a little or no benefit from the services. In this church a need seems to exist for a general improved service. The conditions to secure success in this peculiarly difficult work are a clear and graceful sign delivery and good sermons. It cannot be denied that all who have used the sign language competently in conducting the Sabbath services, have been gratified with the attention given by the deaf to the services.

MR. FOX, of New York : There is one phase of our religious service in Institutions, which, while not a question of the order of religious exercises, is still a subject so nearly allied to it as to be deserving of more than a passing notice. I refer to the mode of expression used—to the abuse of the sign language in prayer.

If we will but observe a minister offering prayer in spoken language, we shall see, as a general rule, that he maintains a fixed position, a dignified, religious mien, and offers his praise and supplication in a sensible manner that cannot fail to inspire an inward response in the breasts of his auditors. Contrast this with the habit of some of us in offering prayer in signs; we seemingly forget the solemnity of the moment, and the sanctity of the subject. There can be no reasonable excuse for prancing around the platform in an effort to dramatize an appeal to the Almighty Dispenser of all Good, and this misuse of signs by the substitution of contortions, is the strongest weapon in the hands of those who are already sufficiently prejudiced against the use of signs.

Signs, when properly employed, are the best, the only means for presenting prayer to a congregation of deaf-mutes and for drawing out their innermost religious feelings, but when flourishes and rushing hither and thither take the place of clear, rational signs, the action becomes a burlesque and as such only can it impress the onlooker, be he deaf or hearing.

Let us have earnest, sensible prayers, delivered in those quiet, clear signs, of which the language is so capable, and which so powerfully portray the innermost feelings of the heart. We shall thus produce better and more lasting effects, not only on those who can understand and appreciate signs, but even on the casual visitor totally unfamiliar with them, but who will insensibly appreciate the solemnity and beauty of a language that speaks without sound of voice.

DR. WILLIAMS : I beg leave to add a word regarding the use of hymns. They are frequently used in the chapel services in Hartford, but not just in the way illustrated by Dr. Peet's pupils this afternoon. A part of the hymn is written on the large slates and is explained by the teacher in free signs, not by signs in the order of the words. Many of our hymns are rich in meaning, and the endeavor is to bring out this meaning clearly. This is an exercise which is appreciated, especially by the older pupils and graduates.

MR. ROBERTS, of Western Pennsylvania : There may not be any thing new or different in our programme, although it is longer. There are five services on Sunday. At 9 A.M., we have a Bible Reading lasting about fifteen minutes. The teachers are on duty until 8 P.M. Pupils remain in the study rooms until 10:15. The International Lessons are used. At 11, the regular lecture of the day is held, and is of half an hour or three-quarters duration. At 3:30 P.M., Sunday-school begins, lasting an hour and a quarter. At 7 P.M., a lecture of an hour's duration is given with a male teacher on duty. The teacher on duty is practically in charge from nine o'clock in the morning till eight in the evening.

A voice : "How about the children?"

MR. ROBERTS : They would miss dinner rather than any of the services. The two higher grades, first and second divisions, study the Westminster Leaf, which I consider best for advanced classes, and it is used with good results. On Friday afternoon, fifteen minutes are devoted to explaining words and phrases. Friday evening an extra hour is devoted to the same subject, and again on Sunday. A blank-book for questions is used, and on Monday the pupils give a version of the lesson in their own language.

THE PRESIDENT : I question the wisdom of long services. Do we not eliminate too much pleasure from the Sabbath? Should we not endeavor to make the day more interesting to our pupils? A debating society for the discussion of Scriptural questions on Sunday would be a good idea. Debates always interest pupils more than anything. The stereopticon may also be made very useful.

In the California Institution, a service is held at one o'clock in the chapel. Sunday-school at half past ten o'clock in the morning is managed by the pupils. The members of the higher classes take charge of the lower classes, and have all the responsibility of their

management. Those who have tried this plan, will hardly realize how interesting it is. The evening is devoted to study of ethical and Scriptural lessons.

DR. G. O. FAY, of Hartford: I spent a Sabbath at the Rochester Institution, which was very interesting, and I suggest that Mr. Westervelt be called upon to give the order of the Sabbath at his institution.

MR. WESTERVELT, of Rochester: Sunday is hardly a day of rest in our school, except as change of occupation gives relaxation and refreshment—on the principle illustrated by the philosophic horse, which, obliged to tread in a circle for six days of the week, found rest on Sunday in tramping round in the opposite direction.

On the Sabbath we omit the usual morning prayers. At a quarter to nine, a service is held in the chapel. The exercises are opened with prayer followed by the recitation of a hymn by one of the pupils. Then a talk—usually from a Bible text, but often upon a subject suggested by some incident of the previous week's experience, with Scripture texts for illustration or emphasis. At the end of the forty-five minutes talk, another hymn is recited. In closing, all unite in repeating the Lord's Prayer, the larger portion of the school speaking the words, the others spelling in concert with the leader. All pupils, large and small, attend this service. On communion Sundays, chapel exercises close in time to allow pupils to attend church in the city.

For all the classes above the Kindergarten, there is a morning study period, from eleven o'clock till twelve, for the preparation of Sunday-school lessons. Sunday-school is from three to four o'clock in the afternoon. For this hour all the teachers have classes assigned them, but as all of the grades are in the Sunday-school classes at the same time, we need more teachers and classrooms than we do on week days. Members of the family and of the high class take charge of the extra classes. In the most advanced class the lessons are conducted by the pupils themselves in turn, under the direction, and with the criticism of the teacher of the class. The Kindergarten children do not study in the morning, but are entertained by their attendants, they go out for a walk in the woods, or to play in the yard. Their Sunday-school is from three to five, during which time they are interested in stories of a moral and religious character, and are entertained with pictures of Bible scenes, etc. At four o'clock, the older pupils have a missionary meeting. As their missionary society has been a great benefit to the school, I will give somewhat of its details. The society was formed nine years ago, when Mrs. Waterbury, who had been one of our teachers, went to India as a missionary. At the request of the society, Mrs. Waterbury found a boy, and two or three years later, a second boy whose support and education the society assumed. One of these boys is now in the English Government University of Madras, the other is almost ready for admission. Mrs. Waterbury is now in this country. She hopes some day to return to India and to have the aid of the two boys, Paul and John, who will have been educated by the deaf, to teach the deaf in India.

Another of our teachers, Mrs. Mills, went to Tung Chow, Chefoo, China. She, too, was commissioned by our Missionary workers to find some work for them in her new field. Mrs. Mills found a deaf child,

and as soon as she had learned the language of the province, she began to teach him to speak, and the "Silent Workers" sent money for his support. Dr. Mills, in his preaching tours, had found a number of deaf children, and as soon as Mrs. Mills found that she was able to teach her one pupil successfully, it was easy to increase the size of her school. A year ago she opened the school with five deaf boys, employing a native teacher to assist her. Dr. Mills built a small school-room, and another house for the teacher and pupils' living rooms. For the support of this school, the schools of the United States have very generously contributed. Following is a list of the contributions, which Mrs. Mills has received :—

LIST OF CONTRIBUTIONS TO MRS. MILLS' SCHOOL IN CHINA.

From The National Deaf-Mute College.....	\$20 00
" The Clarke Institution, Northampton.....	23 00
" Deaf-Mutes of Chicago, at Dr. Gillett's Service.....	20 00
" Pearl Day, a former pupil at Jacksonville.....	1 00
" The Tennessee Institution, Knoxville.....	15 00
" " Wisconsin Institution, Delavan	25 00
" " Ohio Institution, Columbus	17 00
" " American Asylum, Hartford.....	26 25
" " Western New York Institution, Rochester	100 00
" " Pennsylvania Institution, Philadelphia.....	62 83
" " California Institution, Berkeley.....	20 00
" " Boston Deaf-Mute Society.....	15 04
" " Deaf-Mutes of Park Congregational Church, Nor-	
wich, Connecticut.....	8 50
" " Deaf-Mutes in Hartford.....	9 00
" " Minnesota Institution, Faribault.....	15 00
" " Maryland Institution, Frederick.....	23 33
" " Mrs. N. M. Waterbury... ..	5 00
" " Kansas Institution, Olathe.....	13 51
" " Deaf-Mute Helpers, Tennessee Institution.....	50 00
" " Colorado Institution, Colorado Springs.....	8 00
" " Silent Helpers, New Jersey Institution.....	100 00
" " Halifax Institution, Halifax, N. S.....	8 50
" " Mrs. Wm. Wyman and friends, Cincinnati.....	10 00
" " Miss J. A. Shrom and friends, Wilkesburgh, Pa... ..	48 00
Total.....	\$688 45

I take this opportunity to urge upon teachers of the deaf the advantage it will be to the deaf of this country to give their aid to the support of this work for the deaf in China. We shall all receive renewed appeals for help, and I trust that every school will contribute to Mrs. Mills' good work. There are many ways in which much can be accomplished, the New Jersey school, not one of the largest schools in the country, held a fair, at which they raised one hundred dollars for the Chinese mission. To return to my narration of the Sabbath exercises of the school in Rochester :—At seven in the evening the pupils assemble for a reading hour. From eight to half-past eight, two voluntary prayer meetings are held, which are attended by nearly all of the pupils of the primary and advanced grades. These meetings are in charge of teachers, who select pupils to act as leaders. During the week a printed order of exercises is filled out with the names of those who

are to take part. Many of the children are in the habit of writing out prayers or remarks for the evening meeting ; these are corrected by the teacher who has charge and are repeated as corrected.

The chapel exercises, the Sunday-school lessons, the prayers and hymns, are spelled, or both spelled and spoken. On the first Sunday of every month, all the professing Christian pupils of the school meet as a Christian association. They consider the requests of pupils for admission to churches in the city, and confer with the Superintendent upon whatever matters may pertain to the ethical and religious interests of the school. The members of the association, divided into committees, representing the different denominations, correspond with former pupils, learning whatever can be learned about them, and finding ways in which they may lend aid to such as stand in need.

S. T. WALKER, of Kansas : It is quite remarkable to me that, geographical position, heredity, or some other cause should produce such a marked difference in boys as must, from the remarks of Mr. Roberts, evidently exist between the boys of Western Pennsylvania and those of Kansas.

Now, in Kansas we have a school of 240 pretty good boys and girls, but I must confess that they are always ready for their Sunday dinner, and in fact would much prefer spending that hour at the table to listening to the most interesting religious instruction.

The reverse would seem to be the case in the admirable school near Pittsburg.

If the truth must be told, and I think it should be, I sometimes find difficulty in arranging the Sunday programme so as to keep up a healthy interest and attention on the part of our boys and girls at all times.

The matter used frequently to worry me, but a philosophical study of the *genus puer* led me back to my own boyhood days in a Methodist parsonage on Sunday, and the final conclusion was that human nature was, is, and will be much the same one generation with another.

I came to the conclusion that with an hour's exposition of the Sunday-school lesson in chapel, another hour's study of the same, and voluntary prayer meetings in the evening, our boys and girls had enough moral and religious food for one day—fully as much as they could masticate.

But the time had to be filled in with something else, and our ingenuity had to be drawn on.

We draw the line pretty strictly, not allowing play or romping or boisterous noise on the Sabbath ; therefore we sought for a mental employment that would command interest and therefore attention.

A plan was formulated, after the custom of many well-regulated families, and consists in providing entertaining reading for all.

But here I was met by another difficulty, the well known fact that only a small minority, aside from semi-mutes, can take the ordinary works of fiction, or other stories found in libraries, and read them with that understanding which rivets attention and creates interest. I then decided to have a season for reading an hour or so after Sunday-school at which a teacher would read to the large family gathered around him in chapel, much as a father or mother reads to their family of children.

For two years the *Youth's Companion* served as our literature. The principal stories would be read (translated into the sign-language)

by teachers appointed beforehand for that duty, and who had made due preparation to perform it in an interesting manner.

Thus we found that our deaf boys and girls were thinking and talking about the same things that the thousands of other boys and girls over the country, subscribers to that paper, were thinking and talking about. The papers were afterwards distributed to those who could read the text of the stories that had been read to them, and the moral of the stories with their prominent characters would frequently be referred to in other chapel talks on other occasions.

We found this an excellent plan, and feel that a continuance of such a plan throughout a ten years' course at school must tend to familiarize our deaf boys and girls with the literature of other boys and girls better than in any other way, and will inculcate a desire for that kind of entertainment. Thus will they become readers themselves. We are now following out this same general plan, substituting standard works for the *Companion*. One of the works that we portrayed in graphic signs, lasting for six Sunday afternoon readings, was "Ben Hur." And the result was that the characters of "Ben Hur" were talked about for weeks among the pupils, and to-day many of them could discuss with pleasant recollections the incidents found in that book. The book itself has been read in the text by several who became interested. Thus do we in Kansas spend our Sundays, and we think we do so profitably.

MR. MATHISON, of Belleville, Ontario: Our religious exercises commence at 9 A.M., on Sundays, by the new and younger pupils being assembled in the chapel to be taught some simple truths by one of the resident teachers. At 11 A.M., the advanced pupils take up the lesson for the day of the International Series of Sunday School Lessons, and any words they do not understand are explained by the teacher on duty. For this lesson we use "*Dew Drops*," published by Cook & Co., Chicago and they are given to the pupils the Sunday before so that the lesson may be studied at opportune times during the week. At half-past two in the afternoon there is a general lecture by the teacher on duty, for all the pupils in the Institution, which lasts, usually, three-quarters of an hour. At 4 o'clock there is a Bible Class which is attended by about one hundred of the more advanced pupils taught by the Superintendent. Attendance at this Bible Class is not compulsory, but the regularity with which the pupils attend is evidence that they appreciate the benefits to be derived. Questions are asked and answered, and a Sunday-school paper, "*Happy Hours*," distributed to each one. Other children's papers are given to the scholars at various times, "*The British Workman*," "*The Children's Friend*," and "*Our Little Ones*," being among the number. Roman Catholic children go to Mass in the city in the morning and attend the afternoon lecture in the Institution. The children belonging to the different denominations get instruction from the pastors of the various churches to which they belong, through an interpreter, at stated times during the month. Nearly every year a number have been confirmed and joined the Episcopal Church, thirteen were recently admitted to the Presbyterian Church, and others again have connected themselves with the Roman Catholic Church. The services evidently benefit the pupils.

MR. SWILER, of Wisconsin : Sunday should not be a tiresome day. In six days the Lord made heaven and earth and rested on the seventh day. We should not eliminate the idea of rest, but endeavor to make Sunday a delightful and profitable day. Great responsibilities rest on us as guardians of deaf-mute children during ten months of the year, besides the secular responsibilities of the schoolroom and shop. The solution of the Sunday question is to be found in rest, ease, conversation, etc., involving cessation of sport, work, and required study. In Wisconsin, the morning service lasts about thirty minutes; study from 11 to 12. At 2:30, one hour is devoted to Sunday-school work. The remainder of the time is passed socially, and in reading. In the evening social religious meetings are held, among the boys and girls alike. A hymn is often read and discussed. No teachers are present unless invited. Memorizing is considered important. A most valuable force is the acquisition of an accurate, thorough, memory of poems and songs. The manner of Sunday observance indicates the character of the home, so also the character of the Institution.

Sunday should be made a profitable day by the acquisition of such habits as we may expect young men and women in good homes to observe and perpetuate; and the observance of the day be so ordered as to attract the learner and secure a proper appreciation of God's Holy Day.

DR. NOYES, of Minnesota : I feel a great interest in the Sunday work among the deaf, and attach great importance to it. In the Minnesota School, the Sabbath exercises are conducted in a manner somewhat similar to those in Hartford, New York and Philadelphia. The Sabbath School is held in the afternoon, and the classes are taught by their respective teachers.

We aim to make the Sunday lesson as interesting as any lesson of the week. Sometimes a pupil looks upon the Sunday-school exercises as of very little importance and treats them indifferently. As far as possible, this feeling should be counteracted and a spirit of inquiry and investigation aroused.

Two things greatly influence this Sunday work. 1. As is the teacher, so is the scholar. If he is deeply in earnest and thoroughly alive to the importance of moral and religious instruction, his pupils will soon catch his spirit, follow his lead, and success is assured.

The manner of life and daily conversation have much to do in influencing pupils. They read character as well as children who have all their senses. An educating teacher, with a Christ-like spirit, who prepares himself properly for this work, will seldom fail to reach his pupils and keep them interested.

2. The Superintendent must be in sympathy with the teachers and the work in hand. There is no more important work to be done in any of our schools than that on the Sabbath. It never should be passed over carelessly, or intrusted to indifferent persons who do not comprehend its importance.

In order to give special interest and arouse a spirit of studiousness and emulation; in the Minnesota School, the last Sunday lesson in each month is made a review lesson. All the classes are assembled in chapel, and most of the classes, one at a time, are called upon the platform before the whole school, and selections are made from questions

written on slips of paper, and the pupils are called upon to spell out the proper answer, and when the Superintendent thinks it best, the pupils put the idea into signs, to satisfy him they understand what they are reciting. Occasionally some simple concert exercise is introduced to give variety and interest. Quite frequently a pupil is called upon to recite the Ten Commandments, or a selection from the Psalms.

This monthly review is believed to be helpful to the school, to the teachers and to the Superintendent, and incites all to careful attention, to the lessons taught, to the language used, and to the thought expressed.

D. GREENBERGER, of New York: The course which is pursued in my Institution in regard to religious instruction is similar to that which is followed in the public schools of the city—namely, the parents select the churches and Sunday-schools which the pupils attend. Some of the pupils go to Rev. Dr. Gallaudet's church; some visit the Sunday-schools connected with the church of Dr. Howard Crosby, where one of our teachers has a special class for them; the Catholic children are instructed by Rev. Alfred Belanger, who has opened a Sunday-school for them in the neighborhood of the Institution. All seem to be provided for some way or other. The fact that most of the pupils come from this and neighboring cities and they are able to spend the Sabbath at their own homes, renders this plan perfectly feasible, and it gives entire satisfaction to the parents.

MR. MATHISON: Is instruction given orally?

MR. GREENBERGER: In the Sunday-schools of Rev. Dr. Howard Crosby, where the exercises are conducted by one of the teachers of the Institution, the instruction is given orally. Rev. Alfred Belanger has told me that he also gave his instructions orally. But I do not know how those are taught who visit different Sunday-schools with their parents or brothers and sisters.

J. H. EDDY, of Rome, N. Y.: The Sunday programme in the Central New York Institution is quite simple. The regular exercises comprise a sermon or Biblical lecture of about an hour's length, in the forenoon, by one of the male teachers, in his turn, and, in the afternoon, the study of the Sabbath lesson from two until four. These lessons are given out and explained to the classes on the Friday preceding, and recited Monday morning. We use Dr. H. P. Peet's "Scripture Lessons" for the younger and intermediate classes, the "Story of the Gospel" for the more advanced, and "Wayland's Moral Science" for the High Class, all of which are entirely unsectarian.

I believe that our common aim in these Sabbath lessons and exercises is to induce our young charges to embrace the life of Christians; but, is not there danger of making the subject tedious and distasteful to them in lengthening or multiplying these Sunday lessons and exercises? Progress in piety is illustrated by the old adage: "A child can lead a horse to water, but ten men cannot make it drink."

The late Cardinal Newman and his brother, John, were brought up in the strictest tenets of Puritanism by a careful and devoted mother, yet when he reached manhood, he drifted first into the English and later into the Roman Church; while his brother became first a missionary and later a free thinker and infidel.

On the other hand, any voluntary effort in this direction by our pupils should receive every encouragement. In our institution, the boys and girls each have an organization of their own for purposes of charity and piety. On Sabbath afternoons or evenings, they usually hold meetings, each society by itself. A teacher is often voluntarily present to lead them, or one of the older members prepares himself or herself for that duty under the advice of interested teachers. During the past year these societies have co-operated in charitable work, and have raised and sent quite an amount of money to the Gallaudet Home, besides purchasing and making up a large quantity of household linen, etc., for the same institution. A large number of both boys and girls are members of the local Deaf-Mute Branch of the Young Men's Christian Association.

It would seem that the surest way of inculcating our pupils with piety and morality is to surround them with Christian men and women, from the Principal to the humblest attendant: such persons as can not only preach well on Sundays, but live like gentle and earnest Christians on other days of the week. The young always pattern after their elders whom they have the opportunity of observing. They do not do as they are told to, but what they see others do; so if this is properly attended to, there need be little fear of their not growing up as they should.

DR. GILLETT: I have just come in and have heard but little of this discussion. I fancy that the exercises of the Lord's day at the Illinois Institution are very similar to those at other institutions. We regularly have a Sabbath morning sermon in the forenoon, and a Sabbath school at two o'clock in the afternoon. Later in the day, meetings are conducted by pupils themselves, with such ceremonies as they prefer. They have a Christian Endeavor Society, composed exclusively of deaf persons, which has a very salutary influence in leading to the cultivation of religious character and development.

But, Mr. President, we should ever bear in mind that the order of procedure in such services, is of less importance than the spirit in which it is conducted. There is no time when the spirit of the Master is more forcibly required than in our Sabbath services. Then it is that we have the fitting opportunity to enforce the teaching of our Lord, in his wonderful talk by night with Nicodemus, "Ye must be born again." Ours is a fruitful field, with ground all fallow, ready to be broken and seeded. But, Mr. President, our responsibility is not fully discharged in the direction of moral and religious instruction, with our pupils while at the Institution. There is a work for us to do for them after they have gone out into the busy world. The deaf naturally gravitate to the great cities, and with some effort they may be gathered on the Sabbath day for religious worship. In every large city in this country, there should be held regular weekly service for the deaf in their own language. Of what avail to them are the great churches, open though their doors may stand from morn till eve, with their eloquent preaching and elegant choirs. Curiosity may take them there for a few times, but they cannot be long satisfied with what to them is but "dumb show."

The Church Mission to Deaf-Mutes is a Godsend and deserves encouragement, but it is conducted by one of the smallest sects in the

country, and is but a "drop in the bucket" in comparison with the great work required. An undenominational, or, if you please, an interdenominational service in every city of our land should be held every Sabbath for the benefit of the deaf residing there, and in the vicinity. I am persuaded, Mr. President, that members of this convention can do much to arouse the churches to the importance of this work. There is no missionary work of the churches that is more worthy of aid than this.

Dr. E. M. Gallaudet announced a meeting of the Executive Committee after the adjournment of the session.

Adjournment was had at 5:30 P.M.

THIRD DAY.

MONDAY MORNING, AUGUST 25.

The morning session was devoted to the Normal Department, presided over by Dr. G. O. Fay, of Hartford.

The first hour was devoted to a series of papers on the subject of Language Teaching, and the following papers were read :

THE FIRST YEAR'S WORK.

By Florence E. Leadbetter, of the Horace Mann School, Boston.

I have been asked to write of the first year's work with little deaf children. I have undertaken it, but the task has been a difficult one. You may write of manners and morals, criticise this method and that, philosophize on the principles of a Froebel, a Pestalozzi or a Horace Mann, but when you try to show the practical, every-day work in the schoolroom, words are apt to be vain things and pen and ink a snare. One needs the models and charts, the toys and games, the busy-work, the cabinet of objects, the books and slates, but most of all one needs—the children! For what, indeed, is the school, its methods or equipments, without the child? You may possess all known aids to teaching, you may have worked out your system and methods to apparent perfection, and to-morrow a wee bit of humanity may walk into your room who will look with utter indifference upon all your efforts to interest and please, and in whose presence your fine-spun theories vanish in thin air. You study the child, his needs, physical, mental and moral; then you begin to search your brain for a few new ideas, you lie awake nights thinking, you walk the streets and scan the shop-windows, you sit lost in meditation in the midst of your friends, until, finally, after hours of thought and days of labor, you evolve something which will reach *that* child's special need; and another mind is won from darkness into light. This personal and particular endeavor for each child's individual good is, I think, one of the grand characteristics of schools for the deaf. Of them it may be truly said, "The school for the child, not the child for the school."

But now as to the first year's actual schoolroom work—the drudgery, as some call it—the foundation laying, as we believe, upon which all future success or failure largely depends. In all our plans we have one primary object in view, underlying everything ; that attained, all else, we may hope, will follow. This great object is to make the little folks *happy*. Charles Buxton says, “The first duty towards children is to make them happy. If you have not done this, you have wronged them ; no other good they may get can make up for that.” Another writer has said, “He who makes a little child happier for an hour is a fellow-worker with God ;” and still another, “The best art is painting a smile upon the brow of childhood.”

To make a child happy you must interest him ; when he is interested he is attentive : his attention gained, you may mould him to your will. Especially is this true of the deaf, since all their knowledge must be gained through the eye ; without attention, nothing—absolutely nothing—can be accomplished. But how can we make our children attentive ? This question brings us back to the *magnum bonum*, the first thing to be considered in all we do. *Make the children happy*, and in so doing gain their interest and attention. With the very little ones, the beginners, it must be done largely by means of games and plays. What may seem to the children or to a casual looker-on as *mere* play ; but the teacher and her principal know the underlying threads of language, number, physical and mental drill, which, all unconsciously to *them* are training mind and body slowly but surely day by day.

When the little folks come to us the first school-day in September we are strangers ; but a good game of ball soon overcomes that difficulty, and gives us the object for our first day's work. When we have become pretty well acquainted, and the children begin to feel at home, a simple exercise in concerted movement or finger-drill prepares us for the next step. Now, each one is provided with a long, white crayon, itself a delight to the little ones, and the balls of all shapes and sizes, which in effigy soon decorate the blackboard, are a source of much merriment. In the course of the morning, the word “ball” has been repeated both by teacher and pupil many times, so that now we are ready to write it. I have found the best way to start the children in writing is to have them follow line by line the teacher's copy written a little above theirs on the same board, the pupil following as nearly as possible every motion of the teacher. Some will make a fairly legible word at the first trial ; others will need to try and try again ; but all will make an attempt. After this drill, the children with slate and pencil copy the work upon the board. This is the teacher's opportunity for individual voice drill.

As much of the time after the very first must be given to this individual training, busy work enters largely into the teacher's plans. In this direction the kindergarten material is a great help. For the kindergarten system itself, I believe it cannot be successfully taught to our deaf children ; certainly not at this stage—I doubt if at any time—the knowledge of the words ball, box, and muff, being of far greater value to them, it seems to me, than sphere, cube, and cylinder. But the material used by kindergartners, for which we are greatly indebted to them, and many other things which the quick-witted teacher will

press into the service, keep the little fingers busy and minds active when she cannot give them personal attention. It is, indeed, wonderful what those nimble fingers will evolve from a heap of shells, tooth-picks, counters, or any one of the fifty different things which fill the boxes on the shelves of your cabinet. A teacher, curious to know why a bunch of shoe-strings was hanging in mine, asked if she might see my "exercise with shoe-strings some days." She was enlightened, if not edified, when told they were for bead-stringing, as needles were considered rather dangerous playthings in the hands of five-year-olds. So the most despised and common of objects may do good service in the children's hands. All the arithmetic required of the first year's class may be learned very happily from a set of ten-pins. The teacher must have reached her second childhood, you say. Not necessarily. But she must be "all things to all [children]."

You may be pretty sure that this first day's work has fixed the ball and its name in the little memories, so that to-morrow they will be ready for "throw," "roll," and another noun, whatever the teacher may choose. And it has all been play, all delightful, the teacher one with her pupils, and you have accomplished the most desirable thing of all—you have made them love to come to school. One of "my mothers," as I call them, came to me not long ago and said, in the most mysterious way: "Nellie's the greatest girl to come to school you ever saw. Why, I have to give her a piece of money when I want to keep her home, and *then*, do you know, she cries."

But days will come when the wind is east, the clouds lower, and teacher and pupil alike feel depressed and "under the weather." Then send Johnny down to the corner bakery for a pie. Tell Mary to get eight plates. James to find a knife and fork. Annie to put the pie on the plate. Susie to cut the pie into eight pieces. John to put a piece on each plate. Jane to pass a plate to each child. The children to eat the pie. Frank to wash the plates. Katie to wipe them., etc., etc., as long as you can make it last. Have you ever tried it? If you have, then you can remember the hushed expectancy while John is gone to the shop, the delighted "Oh!" when the pie appears, the intent watchfulness during the cutting, the severe criticism on the equality of the pieces, and their satisfaction when given the pie to eat. Do you think these children will have forgotten the meaning of "pie," "cut," "piece," "knife," "eat," etc., the next time you have occasion to use them? And the weather? The wind is due south and the air as fresh as a May morning. So much for illustration. In this way the little folks learn the first year nearly all the verbs in common use, one hundred or more nouns, besides adjectives, particles, their names, and various colloquial expressions of speech.

I am sure we shall all agree that language, written and spoken, is what our children most need to acquire. How shall we give it to them? I believe it can be done most successfully by making every word and sentence visible to them, not only on the lips but in black and white, on board, slate or paper. Let every word they speak or that is spoken to them be written; then the written form will help the memory of the spoken, and *vice versa*. Spend fifteen or twenty minutes every morning in writing out the various items of information which the children are eager to give when they come in fresh from

home. In this way you have a vast amount of colloquial language of much greater value than the formal phrases of any lesson-book. Keep, as far as possible, all words, as fast as acquired, in sight either upon blackboards or charts. We do not fully realize how many times a word strikes the ear of a hearing child before it becomes a part of his vocabulary. Let us try to remember this, and keep the deaf child's vocabulary constantly in his sight at the first. Then give him books. The first year ! you say ; yes, the first day. If he is a bright child, he will find the word "ball," and that is a beginning. Do you remember when you were a child and had a picture-book given you, how you looked it through and found out the story from the pictures before you thought of reading it ? You even cast it aside without reading if the pictures did not promise sufficient reward for your labor. So the deaf child learns much from pictures and the printed explanations beneath.

Make phrase-books for him. Take pictures from newspapers, magazines, anywhere, and write beneath each the most striking fact concerning it. It will cost you but time and patience. For instance, in last night's paper was an advertisement illustrated by the figure of a woman washing a window. Cut it out, paste it into your blank-book, write beneath it, "This woman is washing a window." Perhaps the boy who gets that book, may know one, two, or even all three of the principal words. At least five out of ten children will get the sense of it, in any event. When he goes home that night, he may see the same illustration in the evening's paper. Perhaps he will write on the margin "This woman is washing a window," possibly only "Woman washing window;" but is it not worth your while ? If you will write out little stories, introducing the children's names, with various actions, using principally known words ; then let them act these stories out before the class ; you will afford them a world of amusement while fixing the old forms and bringing in new words and unknown expressions. The opposite of this plan works well, too. Let the children act in pantomime with objects whatever they may choose, while you write on the blackboard a description of their actions. Whenever you feel quite sure that the child has acquired language enough to begin to use it independently, questions seem to be the most natural means of inducing expression. What is your name ? Where do you live ? Have you a mother and father ? Do you ride to school ? What color are your eyes ? How many buttons have you on your boots ? Is it a pleasant day ? Short conversations like this, between the teacher and one pupil, the others copying as it is written on the board, prepare them for communication with the world from which they are so shut out.

These are but a few of the many, many devices which we have found helpful in our work. Possibly no one of them will prove of practical value to *you* ; each teacher must of necessity study out her own plans and methods to meet her special needs and the requirements of her pupils. And, after all, the best laid plans will go for naught unless the *spirit* in the schoolroom is right. It *must* be bright and happy—always sunshiny, never cloudy. If things are going wrong with us, we stop right where we are, have a good game of romps and begin over again. It is good for us all, and the only way to insure a successful day.

Pardon if I seem to exalt my office, but I believe there is no grander mission on earth than to be sent to teach the deaf to hear and the dumb to speak, and I believe just as truly there is none which requires so much of faith, patience, love, long suffering, for its right accomplishment.

"In this [work] ye shall have tribulation," but in the better land to hear from the lips of the Great Teacher (who shall unstop the deaf ear and loose the fettered tongue), "Well done, good and faithful servant!" "Inasmuch as ye have done it unto one of the least of these, my brethren, ye have done it unto me," will be an exceeding great reward.

METHODS I HAVE USED

IN TEACHING DEAF-MUTE CHILDREN BETWEEN SIX AND TEN YEARS OF AGE.

By Luann C. Rice, of the New York Institution.

Teachers of young deaf-mute children are often asked: How do you begin to teach them? and, How are you able to make them comprehend the meaning of simple language?

The most practical and comprehensive way is found in the use of Dr. I. L. Peet's "Language Lessons." The twelve foundation words teach the child to associate each object with its name and use. For instance, the teacher points to the word "key," and shows the child a key and the sign for it. To a child of six, who possesses an ordinary degree of intelligence, this drill can be made so attractive as to make it understood readily and learned rapidly.

In learning to spell these words, he has learned the alphabet, and simple directions are given, the teacher making the sign for each word, thus teaching the child not only to perform different acts, but to observe others perform the same, and to answer questions about each act in signs, spelling and written language. After learning the interrogative, every direction given admits of more questioning.

Following these simple directions, which give the parts of speech step by step in this course of instruction, language is developed much more rapidly than by any other I have used. In connection with these lessons, numeration is taught, expressed in both figures and words.

A correct foundation for penmanship is laid, by copying short lessons every day from the "Language Lessons," which are printed in script, and also from the "Spencerian System" for beginners.

After becoming familiar with the interrogative forms, short daily journals are written from questions about the weather, events with which they are familiar, their playmates, friends, themselves, and the text taught at morning prayers. This form of composition aids in letter writing, giving a variety to the expression of their ideas, both natural and childlike.

Another development of language is from a classification of words embracing names of familiar nouns, such as tools, weapons, playthings, clothing, furniture, dishes, fruits, vegetables, food, parts of the body, birds, animals, trades, etc. Not finding such a book as I desired for this object teaching, I made one, using pictures obtained from every

possible source. This brings a picture of almost every noun taught before the child and helps him, not only to understand how it looks, and its use, but to reproduce it with his crayon. In connection with the drawings, simple descriptive sentences are written.

It is said that in our public schools over four per cent. of the girls can distinguish colors, but less than one per cent. of the boys are able to do so. Considering it quite as important to teach colors to boys as to girls, I have used, for the purpose, colored papers, painted sticks, crewels and ribbons. Thus every boy can be taught colors, their different shades, and to match them.

Simple addition, subtraction and multiplication, I teach from written cards, using all the nouns taught in the "Language Lessons," repeating again and again all which have irregular plurals. A short exercise every day in reviewing the verbs in both present and past tenses, and the adjectives, is a help to their correct use in subsequent composition.

The second year, I devote two hours every week to the practice of correct penmanship, using "Gaskell's Studies" and bank checks. Daily penmanship, unless watched, develops a careless habit difficult to overcome.

The years between six and ten being the most impressionable, the religious instruction given should be the best. The books I have found most useful in this foundation work are Dr. H. P. Peet's "Scripture Lessons," "Calvary Catechism," and Foster's "First Steps." From these I have arranged simple questions which give the child clear ideas of Bible truths.

Many of these little ones come to us from homes where there is neither moral nor religious influence. Ought we not, as their teachers, to give them the best and most earnest work of which we are capable?

THE TEACHING OF BEGINNERS.

By A. D. Hays, of the West Virginia Institution.

My paper on teaching language to beginners may be nothing new, as I have no doubt but that I have followed a plan similar to many of my fellow teachers, and will ask their forbearance while I give a synopsis of my first year's work and my *modus operandi*. I began by teaching the pupils to write the names of such objects and pictures as were nearest at hand and those with which they come mostly in contact in their every-day life, allowing the pupils to make the selections in order to teach them to observe and to keep them interested. A list of the words was entered in a copy book for each pupil, which served for slate practice in school as well as for evening study. These words were also copied on a chart for the schoolroom, and when the pupils were not busy with slate exercise, I would point to the words and ask for the objects, or point the objects and require the pupils to point out the equivalent words on the chart, or spell them on their fingers, and in this manner of varying the exercises kept the pupils from getting tired. At the end of the first month, the pupils had a vocabulary of some fifty nouns, and had learned to write all the letters in the alphabet and also to make them on their fingers. In lieu of

letters to their parents and friends, the pupils wrote as many of these words as they were able without copying. Then I took up verbs and adjectives, using them in short sentences, such as, "I see a hat," "There is an apple," "John has a new book," "Laura has a new doll," "I want a knife," "Thomas likes candy," "I am well," "Addie is sick," and so on, as the ideas occurred in every-day conversation. All these sentences were kept in the copy books and used as lessons, every day varying the forms of sentences to suit the occasion, and adding new ones as they came into demand. Having kept up this practice through the second month, the pupils were able to write several correct sentences, which, with a few extra ones, their own ideas put into English, made fairly good letters to send their parents and friends. All the letters and succeeding ones were copied into blank books, the new sentences, or rather the whole letter, forming a lesson. It may not be out of place to state here that parents and friends were requested to use such language as the pupils had at their command, when they wrote them letters, to enable the children to read their own letters without assistance, and to teach them to be self-reliable. As the pupils' vocabulary was enlarging, and they had not yet been introduced to print, I began classifying the words and printing them on separate sheets, which were kept in book form. In nouns, the singular and the plural were given; also the habitual present, actual present and past tenses of the verbs. The adjectives and adverbs with the phrases were printed as far as practical with their opposites—namely: good, bad; clean, dirty; warm, cold; etc.

These vocabularies were also kept in charts corresponding with the printed sheets, and were used for reviewing or as helps to spelling. Questions in written forms and the pronouns were introduced as the occasion might require. One of the pupils would pick up an object or point to some particular picture, and then write or spell: "What is this?" or, "Whose hat is that?" etc. The others would answer first in the abbreviated form, "A book," or, "John's," etc., and then give the sentence in full, using pronouns when possible. The pupils were drilled in language about the same as in the preceding month, till the Christmas holidays, when they were given a large stock of toys and presents, which were selected with a view to using them in the school-room. These toys, with those previously collected, represented objects in common use, and as they could be conveniently handled, it was easy to perform or describe any action desired. The pupils were taught to use the familiar commands and requests, and there was no flagging in interest, as each pupil took his or her turn in giving a command or performing an action, and tried to outdo another in bringing in some new feature. A favorite exercise, where the interest never seemed to abate, was to have one of their classmates shut his or her eyes, while another performed an action. Then the pupil who did not witness it would write: "What did John do?" or, "Where did John put the book?" If any one failed to give the correct answer, another would try, and so on till the answer was given in good English. This exercise was a fair test of their ability to read and write simple language. I now began journal writing, which was a brief record of the events of each day, as reported by some one or more of the pupils, or which chronicled some particular action, and continued it through the rest of

the session. The journal was a most important factor in giving the pupils correct ideas of the tenses. It might say one day, "John is not in school; he is sick." Then it would read the next day, "John was not in school yesterday; he was sick." Or some one will do some particular thing to-day or to-morrow. Describing pictures received a fair share of attention, and was kept up through the greater part of the session. I would hang up a picture so that the whole class could closely examine it at the same time. A question was asked, or some particular part or action represented was pointed out, and one of the pupils would write the desired sentence if able, and so on, each pupil trying to discover something not already described. The questions were attached to the description and the whole would make a good-sized lesson, which would be printed and given the pupils for evening study. The lesson would be carefully studied, or rather memorized, and then the picture would be shown them the next morning and the exercises gone over in about the same manner, except the order of sentences would be changed to prevent the pupils giving the English without the ideas, or in other words acquiring the habit of "parroting." The pupils were generally given the privilege of asking the questions on the lesson, each one striving to ask the greatest number. Then another picture would be produced and described, all the new ideas being put into English and forming another lesson. No lesson sheet was ever printed till after it was made up as in the above manner. Short Scripture lessons were prepared and recited, very much like the foregoing, minus the pictures. Notation and numeration was made a very interesting study by using a variety of colored crayons. The pupils would be told to make a given number of red, yellow, or green marks on their slates, and then questioned in regard to how many marks were on certain slates, or how many marks of a particular color, or who made such and such marks, and so on. This exercise was also performed with objects. Mental addition and subtraction was most satisfactorily carried out by using short sticks, beans, grains of corn, or whatever were most conveniently at hand. The objects were distributed among the pupils, and when collected each pupil added the numbers as they were taken up—as, three and two are five; five and six are eleven; etc. Counting on their fingers or the objects singly was discouraged, except when a proof of the result was desired. Then, on distributing the objects again, the pupils would tell me each time any were taken away, how many remained, and so on till the class had been gone through, adding and subtracting alternately. I taught my pupils some geography, consisting of distances, points of the compass, names of the counties in their State, and its principal cities, and also the names of such of the surrounding States and their leading cities, as the pupils happened to learn about in their lessons or otherwise. Everything that had once been taught or explained to them, was repeatedly gone over and enlarged upon. At the close of the session, their vocabularies included some eight hundred nouns, two hundred adjectives and adverbs, about one hundred and fifty verbs, and besides, they had been taught numeration and notation to 100.

DR. G. O. FAY: For the brief space that remains, of the hour allot-

ted to this subject, criticisms, or questions that may have been suggested by these papers, are invited.

MR. HAMMOND : I would suggest that the interrogatories propounded be translated for the benefit of the people in the audience.

MR. CLARK, of Hartford : I ask the age of the pupils referred to in Mr. Hays' paper ?

MR. HILL : From eight to fourteen.

MR. DOBYNS : It has been suggested that when anybody rises their names be called.

MR. MOSELEY, of Omaha : Was the work that of one year only ?

MR. HILL : It was, with the exception of two pupils in the class, who were in their second year, while all others were but one year.

MR. GORDON, of Georgia : Did any of them have any knowledge of language, either spoken or written, when they entered school ?

MR. HILL : No, sir ; that is, with a single exception. At the end of a year, they could write to their friends at home to let them know they were well and happy with their Institution life.

MR. MONROE, of Michigan : What were the hours of work ?

MR. HILL : From eight to one, then an intermission of a quarter of an hour, and then one half of the class went out one hour in the articulating room.

MR. LLOYD, of New Jersey : How do you teach the child to say " Laura has a pretty doll " ?

Mr. Hill illustrates by signs.

MR. LLOYD : How does the pupil know, in teaching that sentence, the difference from " Laura is a pretty doll " ?

Mr. Hill illustrates by signs.

MR. JENKINS, of New Jersey : The paper read Saturday night, on Newspapers, suggested one or two ideas which I have in my mind to discuss. One is that we all use virtually three or four dialects. The papers give but one, the books another, and in our direct intercourse is still another. We should not forget to give such dialect its representation. Another thought is the difference between the acquiring and understanding of a language and the ability to use the same. Perhaps in the course of the session of this convention we will hear about that. I know, in some institutions, this has received special attention, and gratifying results have been obtained.

MR. JOHNSON, of Malone, N. Y. : I have one point I wish to talk about a little for your consideration, and it is a difficult one. The first thing a child, either a deaf-mute or speaking child, learns, is the word " my," and the second is " yours." The difficulty comes in distinguishing between " my " and " yours." I have seen this question come up in school between the smallest children.

DR. G. O. FAY : The hour set apart for Language Teaching is past, and we must now take up the consideration of Arithmetic, upon which *subject four papers* will be presented.

NUMBER WORK WITH LANGUAGE.

By Kate D. Williams, of the Horace Mann School, Boston.

Probably all teachers of deaf children are familiar with the question, "Is it *and* or *from*?" when giving the first questions in number work, involving more language than a few nouns and connectives.

In these first lessons it seems to me a good plan to use verbs, which have been previously explained or acted out in some language lesson, that the pupils, understanding the language of the question at a glance, may give their whole attention to solving the problem, not being in doubt as to the process they are to employ. I depend on the verbs from the start, and try to avoid little key-words, which a child quickly learns to associate with each of the four rules. "All" is a key-word suggesting addition, when perhaps the question as a whole is not understood. "Left" suggests subtraction, and so on.

My own experience has taught me to use the same question, following statements involving different processes, until the children have learned that they are expected to understand the whole, not a part of the statement.

Example.—Annie had six apples and she ate two of them; how many apples did she have then? (Not how many did she have left?)

Ex.—Nellie found two cents in her pocket and three cents in the street; how many cents did she have then?

Ex.—John sold two tops at three cents each; how many cents did he have then?

Ex.—Six boys went rowing. Three boys could sit in one boat; how many boats did they have?

From the beginning, it seems to me better to require a full answer and the formula to indicate the operation employed. This impresses the form of verb on the mind and the principle involved, and makes after work with larger numbers easier.

Ex.—James receives four letters every week; how many letters does he receive in a month?

He receives sixteen letters a month. $4 \times 4 = 16$.

To enlarge the vocabulary, I have given many different forms of the same question, substituting a new one as soon as a former one is understood.

Ex.—Mrs. Brown sold three chairs to Mrs. Smith at five dollars apiece; how much did Mrs. Smith pay for them?

How much did Mrs. Brown receive?

How much did she get for them?

How much did they cost?

What was the price of the three chairs?

How much did Mrs. Smith give for them?

How much were they worth?

From time to time, I have asked questions other than the one which would naturally first occur to one, in order to reach the minds of inattentive pupils.

Ex.—John, James, and Frank went fishing. John caught two fishes, James three, and Frank one; how many more fishes did James catch than John?

It has been my experience that two or three pupils will answer.

"six fishes," adding the number without noticing the question, simply from carelessness.

In giving numbers over hundreds, it seems to me better to use (to begin with) objects which the pupils can really see in great numbers, as the pages of a book, the bristles of a brush, a paper of pins, etc. A thousand soldiers rather than a thousand butterflies.

These few suggestions come from my own experience, and I trust may be of some use to those who are beginning work with deaf children.

HOW AND WHEN ARITHMETIC SHOULD BE TAUGHT IN PRIMARY CLASSES.

By Mattie H. Bedford, of the Oral Branch of the Pennsylvania Institution.

The question of when or how soon after entering school, children should be taught arithmetic, is a difficult one to answer.

It depends so entirely upon their capabilities, the kind of teaching they have had, and the progress they have made in acquiring and using language.

The first year of a child's life, in an Oral School, is nothing more than drill work for teacher and pupil, and at its close, if the pupil has developed a good voice, can read and write simple sounds, and has a knowledge of five or six hundred words, who can but say that the results are excellent.

But are such children prepared to begin arithmetic? From my own experience, I should say most emphatically, *No!* My idea for them is to *keep them talking—teach them language and nothing else, until they can make known their wants and ask and answer questions.*

When a child has acquired this amount of language, he is able to comprehend the language of simple, practical, questions in arithmetic; if you will notice the kind of mistakes our pupils make, you will see that the majority of them are due to a misconception of the language.

Children may know the four rules thoroughly, but if they do not comprehend the language, how can they intelligently perform the arithmetic?

Have you watched the workmen as they lay the foundation for a great building? How carefully they lay each stone and fill out crack and crevice with mortar? So it should be in our primary work—slowly and carefully should we move forward, making sure that each stone is firmly placed before attempting to lay another on top of it.

Just here I would like to speak of those children who fall behind in their class-work. Sometimes this may be owing to lack of pushing on the teacher's part, but we all know there are those who cannot, try as they will, keep up with their classmates, and for these I would ask your sympathy, and urge that they be put in a lower grade before their Tantalus-like fate utterly discourages them.

How shall we teach arithmetic to primary classes?

By making it as simple as possible, and always remembering that our first object is to help our pupils acquire, and make their own, the greatest amount of language.

Never take for granted that they must know a fact, because it is so evident to you.

Remember that *children, as a rule, never think or reason for themselves*; they leave that for their teachers to do.

In beginning to teach numbers, always associate them with objects; when you teach a child 1, 2, 3, 4, etc., let the 1 represent some object, as, 1 ball; the 2, two objects, as, 2 balls; thus inculcating from the first the idea that a number represents "how many" objects.

After a child has learned to count and write numbers, begin with such questions as: How many eyes, feet, etc., he has? How many doors, windows, etc., he can see? Etc., etc.

Now ask: How many feet have John and Harry? A bright pupil will immediately answer, 4 feet. Do not be satisfied with this, have him put his hand on each boy's feet and prove to you that he *knows* they have four feet. In answering such questions, I always have my children give a *direct* answer; it makes them familiar with pronouns, and helps them to speak correctly.

Take advantage of every idea that comes up in your class-room, which can be applied to arithmetic. Do not think, because you teach arithmetic from 9 to 10, that at 12 you must not stop to bring a point home. The successful teacher is the one who makes the best of her opportunities. If Harry tells you he had apples for dinner on Sunday, inquire how many he ate? If he does not know, tell him he must remember next time; it is more than probable, when he has them again, he will be able to tell you, and also how many John had.

Write on the large slate: "Harry had 2 apples, and John had 3 apples; how many had they both?" Have Harry hold 2 balls, and John 3 balls, to represent the apples, ask the class the question—the objects being directly in front of them—and you will quickly receive the correct answer.

Keeping an arithmetic journal, I have found very interesting and helpful to the children. Such items as "Susan took 2 needles from the cushion and lost one;" "John's father sent him a dollar, and he bought a knife for 25 cents." I used these for examples, and as each part of them was understood by the class, they were interested and eager to find the results.

Having taught addition and subtraction in this natural way with practical subjects, *let the children make examples, using the forms you have taught.*

A pupil learns to do arithmetic more or less mechanically; but if you have taught him the principles of addition and subtraction, so that he understands them thoroughly, when you require him to write examples, he will be able to do it.

I do not believe in giving a class individual work to perform. I think that, *until they have learned to reason and have become more accustomed to the forms, it is better that all the work be done entirely under the teacher's eye.*

Do not give a class written work to perform that they cannot do mentally. Mental arithmetic requires more thought and concentration of the mind than written work; it makes them talk in giving the answers, and helps to make them better lip-readers.

After you are satisfied as to their understanding of the language and

forms, give them written work, but have them write the explanation of each part, as : John had 10 cents, and found 3 cents ; how much had he then ? Ask questions about it, such as, " Who had some money ? " " How much had he ? " etc. Have them write on their slates each fact in the question :

John had 10 cents.
John found 3 cents.

He then had 13 cents.

To teach them the sign of addition, have them write : 10 cents + 3 cents = 13 cents.

Do not tire the class with too much arithmetic at once ; give it homeopathically, and you will find both your class and self enjoying the arithmetic lessons.

Slowly, sometimes feeling discouraged that you have made no progress, press onward, and with patience, perseverance, and a determination to succeed, you will lay a foundation that will not need rebuilding for the advanced work.

PRIMARY ARITHMETIC.

By G. M. McClure, of the Kentucky Institution.

Nearly all the literature extant on the subject of teaching arithmetic to beginners, assumes that the child to be instructed is a hearing one of average intelligence and at least six years of age. But though there are many admirable features in this literature and suggestions may be found that will help to surmount difficulties, the teacher of the deaf, perusing it with a view to obtaining assistance, must have a painful sense of something lacking, and is apt to conclude that it is useful more as a source of inspiration than a place from which to obtain working plans. But one lesson it teaches us, that we should heed: all the standard authorities urge the importance of the utmost thoroughness, the most careful preparation in the primary stages, and that instruction begin at the very beginning. But the beginning for the hearing child is not the beginning for a deaf one ; if so much painstaking care is necessary in laying the foundation of the former how much more so should it be required with the latter ! It may appear on first glance that since it is a matter of principles, and not of language, the deaf and the hearing child start on an equality ; but there is an important difference that the teacher of the deaf should consider carefully and provide for. A more admirable preparation could hardly be devised than that unconsciously undergone by the hearing child in his daily experiences and conversations, which in the nature of things the deaf child must miss, and for which there is for him no satisfactory substitute.

Nearly all the Institutions now have their courses laid out, so that the teacher may know just how far he is expected to take an average class during the term. The teacher should make it a point to

thoroughly digest the plan he is expected to follow, to the end that his instruction may be to the point, with nothing omitted on the one hand, nor time wasted in repetition or superfluities on the other. The daily lessons should be as the succeeding links of a chain, each uniform and perfect, binding together the beginning and the end. I think that after the aim has been duly impressed upon the teacher, large liberty should be allowed him in carrying it out. Plans that in the hands of one teacher would prove a success, may in the hands of another prove a failure, and any interference brings a divided responsibility. To achieve success, the plan must be followed persistently; for, as a rule, the more closely the teacher confines himself within the prescribed bounds, the better the results will be. Even a poor plan faithfully carried out will yield better results than a good one only partly applied.

Lessons in the primary stage should be prepared under the eye of the teacher. There are, indeed, few points in the early training in arithmetic that could be assigned for study, and they are such that few pupils could be trusted to do the work intelligently or thoroughly without the teacher's supervision. They need guidance in *how* to study as well as in *what* to study. While arithmetic is a study to which most of our pupils turn with pleasure, it is also one that tires their minds quickly, and should never be prolonged after signs of weariness begin to manifest themselves. The pupils will, in the end, make faster and far more satisfactory progress, when the lessons are so short that they see them close with regret, than when they drag to such a length that all interest is lost.

The success of the recitation depends more upon the teacher than the pupils. No matter how well prepared the class may be, if the teacher is cold or unsympathetic, preoccupied or irritable, a damper will be thrown over the class that will leave a feeling of failure. Of course the teacher should have the lesson perfectly mapped out before entering the schoolroom. He who trusts to inspiration, leans upon a treacherous reed, that will fail oftener than it will serve him, and is neglecting one of the first conditions of success.

The first step in teaching is to develop an idea of the value of numbers, and to do this, objects are indispensable. The first year, pupils should have no other exercise in arithmetic beyond drills in writing numbers up to ten, and in counting. I would allow them to take slate and pencil, and tell me, "I see three chairs," "John has eight marbles," etc., confining them to objects they can see about the schoolroom or that they know to be there. If a mistake is made, some member of the class should be called up to count the objects before the rest.

The second year I would begin teaching in earnest. Teaching the class to write the numbers up to 20 and to make the Arabic symbols to correspond, and with objects before me, I would construct the addition and subtraction tables with the class, letting them make the discoveries, while I guided the operation. Let it be required to find the sum of 5 and 3; I would illustrate that the two quantities combined made 8; that having 5, I lacked 3 to make 8; that 8 less 3 left 5; that having 3 I lacked 5 to make 8; that 8 less 5 left 3. I would drill the pupils thoroughly on these tables, giving meanwhile practical

problems, and, before passing on, I would make sure of three things—that the pupil could do his work with accuracy, with a reasonable degree of rapidity, and that he could state it in correct, if simple, form. For instance, I would have him able to combine 6 apples and 9 apples, and to give me such an expression as this: “6 apples and 9 apples are 15 apples,” and to use the signs of addition and subtraction between the Arabic symbols in his slate work.

I would teach the tables of the other two rules in the same manner, and the principles themselves on the same plan, using objects at first with all of them, drilling unsparingly, and insisting on the three points of accuracy, rapidity, and correct form of expression. I would, however, keep up the use of objects only so long as I found the pupils unable to grasp the significance of the operation without them. Objects are a means to an end, like a crutch, useful in its place, but a hindrance after all, when not necessary.

From the very first, the teacher should set himself to give the pupils a mastery of the little things of arithmetic, the absence of which is so vexations in the advanced department. Let him be sure, when the pupil finishes the four rules, that he knows the names and meaning of the signs $+$, $-$, \times , \div , $=$, etc.; that he can deal intelligently with a “sum” or “quotient” if necessary; that he can tell which quantity is repeated “times” in a problem in multiplication; and, in short, that when an advance is made, the principle laid aside has been mastered in all the details. A principle may be many sided, and to learn to recognize it under its different aspects requires time and patience. But nothing is gained by being in a hurry. It is far better to have the pupil go out from us with only a good, practical, working knowledge of the simpler rules of arithmetic, than with a more ambitious array of principles on stilts. Besides, it will generally be found that the pupil, whose foundation is good, will be able to advance much more rapidly when advanced arithmetic is reached, than he would if he had been rushed through the primary stage.

The conditions that justify an advance are, as I have stated, three—a clear understanding of the principle involved, as demonstrated by the ability of the pupil to explain his work in intelligible English, accuracy, and a reasonable degree of rapidity. Purely mechanical work should seldom be given as a slate exercise, when it is possible to give other kinds involving judgment and written explanations. The value of these explanations can hardly be overestimated. They compel the pupil to take notice of every step in logical order, help to fix the principle in his mind, and are, besides, a direct help in language.

The old-fashioned schoolmaster probably taught arithmetic better than any other branch. He has left us many valuable legacies in his time, but it has become the fashion to sneer at things just because they are old, and so many an excellent feature of the old-time school course finds itself in disfavor. “Mental gymnastics,” as characterizing the old-fashioned drill in mental arithmetic, has become a term of reproach, but

“Brand him who will with base report,—
He shall be free from mine.”

As our bodies thrive under a system of gymnastic training, so with our minds, and I know of no way to cultivate the quickness and accu-

racy so necessary in arithmetic as the mental drill, and, as an accessory, I would not hesitate to apply it in abstract form. Rapidity and accuracy are cardinal virtues, and should be cultivated carefully in the primary department, for if not obtained the chances are that they never will be. There are few things more trying to the patience of the teachers of the advanced classes, than to have the pupils hesitate and blunder over the very simplest calculations. These indispensable attributes should be cultivated by mental drill. After the tables are taught, drill on them should be incessant. A plan that I have found very successful is, to write out the combinations in, say addition, on the board, range the class in front of it, and day after day practice on it, pointing here and there as rapidly as I can get an answer.

I have found that, as a rule, the children turn to arithmetic with a keen interest, for if they have been well grounded they are not so liable to make mistakes, as in the study of our crooked English, and if mistakes are made, they are of a kind that can generally be made plain to them much more readily than those in language. Therefore, with a little variety to add spice, the task of teaching this branch should not be a discouraging one, for it is generally the case that, instead of being compelled to urge his class forward, the teacher will have to hold it back. The necessary variety can take on many forms, but the spirit of emulation is probably the best ore to work upon. For instance, I sometimes allow two of the leaders to choose sides, and ranged in opposing lines, and with slate and pencil before me to mark errors, have a drill that wakes up the laziest laggard in the class.

After the four rules have been taught, there should be a review extending over a period of several months, during which every part of the foundation should be tested, and the weak spots, if any be found, strengthened. Combining together in miscellaneous form the principles learned, and making the pupils write out an analysis of the work, begets self-confidence, gives an excellent training in combining the principles, and an opportunity to assimilate what has gone before. The problems presented should, as far as possible, be practical, and the superintendent's office can profitably be put under contribution for items of expenditure. The dry bones, so called, of arithmetic, need not be so very dry, if the teacher will only throw a little life into his instruction, and set the pupils to figuring out such live problems as the cost of the clothes he wears and the food he eats.

"The boy is father of the man." The first years of the school life of a pupil are parent to those that follow. What a child is during this primary stage, he will, as a rule, be in all coming years. The habits of study formed, the degree of proficiency he strives for, the processes of mind he acquires, the manner of taking hold—all those considerations involved in the "start," will remain a part of him for good and all. But one of the hardest lessons for mankind to learn is "to labor and to wait." We are all so anxious to see our work begin to take shape, and grow under our hands, that we are tempted to rush through with the foundations, only too often to discover, when too late, that we have made a mistake. The foundation is the point of weakness or strength; laid in patience and wisdom it is a vantage ground, upon which every difficulty of the after course may be met and conquered; laid without regard for these considerations, disappointment and fail-

ure are certain. The little things neglected at the beginning, are the uneven brick that shall throw the entire wall out of plumb.

At the present time the cry, with ever-increasing urgency, is for better foundations. The world is advancing, and we must advance with it. The results that were considered good a decade ago, are held mediocre to-day. We follow in the main the same lines of teaching, use the same methods that the pioneers did, and it is only as we introduce more system, and lay the foundations more carefully, that we achieve better results.

HINTS ON ARITHMETIC.

By Thomas F. Fox, of the New York Institution.

I.—RAPIDITY IN ADDITION.

Adding is reading. We grasp at once *commercial*, why? Because we have learned the word. We look at the succession of letters, and if there is a mistake in the arrangement, the eye notices it at once. Look at the word "*commerical*,"—what is the matter? Only the transposition of the letters *c* and *i*; and yet what confusion it makes. This is because we, in reality, spell the word every time we grasp it, but we do it so rapidly as not to be conscious of the fact. The same is true in adding a column of figures.

Difficulty in adding is a very common defect in pupils, and difficult adding is very liable to be incorrect. Recognizing this, it is the practice in this Institution to employ the arithmetic hour, in the first few weeks of the Fall term, in rapid adding exclusively. This practice prevails in all the classes without exception, the columns to be added varying according to the grade. Rapid addition can be promoted in various ways.

For instance, drill the pupils to read combinations at sight. Commencing with easy combinations, advance step by step. Prepare cards large enough to be seen by the whole class, on which are drawn many such combinations as these—

2	8	4	6	7	9
2	7	3	5	2	8
—	—	—	—	—	—

Show these for an instant, and as instantly ask for an answer.

As soon as possible, have pupils add such columns as—

2
1
3
2
—

They will know the sum of 2 and 3 as soon as they see the figures; also the sum of 1 and 2, and they simply add 5 and 3 and give the sum 8. If necessary, place the work on the board in this way—

2	}	3	3	}	5
1			2		

They should see 5 and 3, instead of 2 and 3, and 1 and 2. Half the time is thus saved.

Applying the same rule to a column of four figures, we write—

$$\begin{array}{r}
 4\ 2\ 3\ 1 \\
 2\ 4\ 2\ 2 \\
 1\ 1\ 2\ 4 \\
 3\ 2\ 1\ 2 \\
 \hline
 1\ 0\ 9\ 8\ 9
 \end{array}$$

The pupil adds mentally 6 and 3, and gives the sum 9; 3 and 5, and names the sum 8; 3 and 6, and 4 and 6, but names only 9 and 10. He does not add 2 and 4, and then 2 and 1 in the first column; he has a mental picture of the sums of those numbers, and adds those and has still a mental picture of the first sum.

In adding columns of figures, it is safer to use the ten method. Suppose the column is as follows:

$$\begin{array}{r}
 8 \\
 4 \\
 7 \\
 6 \\
 5 \\
 3 \\
 8 \\
 \hline
 \end{array}$$

Commencing to add the pupil *thinks*—

$$\begin{array}{ll}
 8 \text{ and } 4 \text{ are } 12 & (10 \text{ and } 2), \\
 2 \text{ " } 7 \text{ " } 9 & (10 \text{ " } 9), \\
 9 \text{ " } 6 \text{ " } 15 & (2 \text{ } 10\text{'s " } 5), \\
 5 \text{ " } 5 \text{ " } 10 & (3 \text{ } 10\text{'s}), \\
 0 \text{ " } 3 \text{ " } 3 & (3 \text{ } 10\text{'s " } 3), \\
 3 \text{ " } 8 \text{ " } 11 & (4 \text{ } 10\text{'s " } 1), \text{ etc.}
 \end{array}$$

This is an attempt to follow the motions of the mind, and to one unaccustomed to its analysis, it may seem complex, but it is not. Time and drill will help the pupil to carry the tens in his memory. The mind moves with great rapidity when it knows what it is about. Uncertainty and doubt impede its rapidity. Let this operation be well *understood* by the pupils, and their rapidity and accuracy will be wonderful.

II.—OPERATIONS IN FRACTIONS SHOULD BE CLEARLY UNDERSTOOD.

There is a great deal of misunderstanding in fractions. Nine pupils out of ten, studying this branch, will be puzzled to show that $\frac{1}{2}$ of $\frac{1}{2}$ is an example in multiplication. If pupils only get a little practice of the right kind, there will not be a long-drawn sigh when a fraction is read. If we only could, and *we can*, get our pupils to see that fractions are nothing more than whole numbers broken, and hence the broken parts are handled just as the whole numbers are, what a vast amount

of trouble would be saved. We should get our pupils to think no more of $\frac{5}{2\frac{1}{2}}$ than of $\frac{4}{2}$ and they should be taught to see that $2\frac{1}{2}$ is contained in 5 *twice*, just as easily as they see that 2 is contained in 4 twice. Suppose we have 5 apples—



Let us divide the middle one into halves, thus—



Now, how many times can I take $2\frac{1}{2}$ from the 5 apples? It is useless to try to teach fractions without objects or illustrations of some kind. For

instance, $\frac{4}{\text{men}} + \frac{3}{\text{men}} + \frac{4}{\text{men}}$ are how many men? Eleven men.

Very well; $\frac{4}{\text{thirds}} + \frac{3}{\text{thirds}} + \frac{4}{\text{thirds}}$ are how many thirds? Eleven

thirds. Where is the difference? Again, $\frac{4}{\text{pigs}} + \frac{3}{\text{cows}} + \frac{4}{\text{sheep}}$ are how many? Why, we cannot add pigs, cows, and sheep. Very

well; then $\frac{4}{\text{animals}} + \frac{3}{\text{animals}} + \frac{4}{\text{animals}}$ are how many animals?

Eleven animals. Once more, $\frac{4}{4} + \frac{3}{2} + \frac{4}{4}$ are how many? We can

not add fourths, halves and fourths. Very well; then $\frac{4}{4} + \frac{3}{4} + \frac{4}{4}$

are how many? Eleven fourths. Say nothing of the least common multiple for the first three weeks when teaching addition of fractions. Teach the pupils to *see* to what the fractions must be changed before we can add them. We too frequently teach *figures* and not *fractions*, hence the confusion of the pupils.

DR. G. O. FAY: There are a few moments of the Arithmetic hour remaining that may be devoted to remarks upon that subject.

MR. ELWELL, of Philadelphia: In order to enable our pupils better to understand Arithmetic, it is necessary that they should practice it in a business way. For that purpose, I suggest that there be a general store, as part of the educational department of the Institution, to which pupils be sent by the teacher to purchase goods. Toy-money and paper bills of various denominations, furnished by the teacher as occasion requires, should be the medium of exchange. As for supplying the store, the resources of the pantry, the store-room, the tailoring, shoe-making, and the carpentering shops, and the printing office could with advantage be drawn upon. Goods that might be purchased at this store by the pupils in their "shopping expeditions" could be applied for immediate consumption in the Institution; and to that end, special measurements of goods, which might be needed for the use of the Institution, in the kitchen, or workshops during the day, or day following, could be given the teachers beforehand, in order to instruct their pupils what quantities to buy at the store, while many other

articles could be returned to the store, and sold over again to other customers the next day. For instance, the housekeeper may need 12 lbs. of rice and 3 pecks of potatoes; the dressmaker will need $47\frac{1}{2}$ yds. of cashmere; the shoemaker will want 2 doz. awls; etc. They all give notice to a teacher of their needs. The teacher, in the course of Arithmetic practice with his class, hands a certain amount of substitute money to some of his pupils, and tells them to go to the Institution's store, and get the things. Here is where practice, interest, and instruction of the happiest kind "masquerades" as play, and for this very reason is so much the better. The pupil, or pupils, either alone, or in company with one another, will buy, say 12 lbs. of rice @ $\$.05\frac{1}{2}$ per lb., 3 pecks of potatoes @ $\$.28$ per peck, $47\frac{1}{2}$ yds. of cashmere @ $\$1.00$ per yd., and 2 doz. awls @ $\$.15$ per doz. A bill will be made out, and a note *large* enough to pay, or more than pay for the goods, will be given. Change, if any, will be returned, and a practical idea of the value and measurement of things will be illustrated better than can be conveyed by words or signs. Of course, pupils will be required to use their own language in making purchases. The goods will be brought into the school-room, questions asked concerning the purchases, comments made on the language used in shopping, and similar problems solved by way of further practice. This method may appear, at first, impracticable, inconvenient, or cumbersome, but "to instruct the deaf, no art can teach" so well as the eye and hand in practical combination; and though it may appear a waste of time to send pupils out of school on an errand of this sort, the object must not be forgotten, when we are to consider the valuable lesson that would be well learned. Some of the teachers of the deaf, particularly those who never had any experience with low grade pupils, are like the hare when he challenged the tortoise—too spry. In their enthusiasm to lead their pupils, or rather to lead themselves, they outdistance them, and disappear beyond the hill of knowledge. Let us all measure our steps—not strides—according to the capabilities of our pupils. To be brief, let us make haste slowly.

DR. G. O. FAY: The time has now come for the presentation of the subject of Articulation by Mr. Greenberger, of New York.

ARTICULATION.

By David Greenberger, of the New York Institution for the Improved Instruction of Deaf-Mutes.

One who undertakes to teach articulation to deaf-mutes, should be familiar with three subjects: First, the anatomical structure of the vocal organs; second, the physiology of the sounds of speech; and, third, the general principles of articulation teaching. It seems to me we could not select more appropriate topics for our discussions during the hours that are to be given up to this section, than those which I have mentioned.

The principal parts of our vocal apparatus are the diaphragm, thorax,

lungs, trachea, larynx, pharynx, and the oral and nasal cavities.* Perhaps some of you may be surprised to hear the diaphragm mentioned as one of the organs that are concerned in the functions of speech. I dare say that great orators, great actors, and great singers have lived and died in absolute ignorance of the fact that there is such an organ in the human body as the diaphragm, and yet it is the organ which furnishes and regulates the necessary supply of air that is forced through our vocal apparatus during the act of speech, and unless this organ is in a healthy state and performs its action normally, correct articulation is impossible. Proof of this statement is furnished by those who are afflicted with stammering. This defect of speech is the result of spasmodic contraction of the diaphragm, and while the spasm lasts, the person suffering from it cannot utter a sound, no matter how great an effort he may make. Speaking of stammering, I wish to be permitted to mention that among all the numerous deaf articulators with whom I have been brought in contact, during my career as a teacher, I met but one stammerer. He became deaf after he had learned to speak in the natural way, and has retained his speech. He has been in my school a number of years. We have tried to cure his defect by the same means† that are employed in the treatment of hearing persons, who are similarly afflicted. The results have been satisfactory.

Returning to our subject, I will say that according to the authorities on such matters, the diaphragm of the adult usually contracts from seventeen to twenty times a minute, while in the infant it may perform forty or more contractions in the same time. The number of respirations per minute must, of course, correspond to the number of contractions of the diaphragm in an equal period of time. In an article which appeared in an Italian periodical about ten years ago, and was afterwards translated for the *Annals*, a prominent articulation teacher asserted that the breathing of deaf-mutes is short and panting and that they perform a greater number of respirations per minute than hearing persons. Speaking, he says, is a most healthful exercise for the lungs, and without this exercise, normal development of the respiratory apparatus is impossible. Hence the defective breathing which he has observed in deaf-mutes and the necessity of beginning the work of articulation teaching with systematic breathing exercises. My own observations in this regard do not agree with his, and I am inclined to doubt the correctness of his conclusions. I believe that the breathing of a little mute, who is in a healthy state, is as normal as that of a hearing child of the same age, and the habit of mis-managing the breath in speaking is the exception but not the rule. The principal purpose of the act of respiration is the oxygenation of the blood. To furnish air for setting our vocal machinery in operation is a secondary function of our respiratory organs, and the additional quantity of air which has to be inhaled during ordinary speaking is not large enough to have any appreciable effect on the physical development of a child. Shouting requires deeper and fuller inspirations and

* Anderson's Physiological Charts and Bock-Steger's Models were used for illustrations during the reading of these papers.

† Taking a deep inspiration before beginning to speak—speaking in a low voice—practising before a looking glass—turning his face so that others cannot see him while he speaks.

helps to develop the lungs. But we all know that deaf-mutes are apt to shout during play even more than hearing children do.

Before going any farther, I wish to call attention to a most excellent treatise on the diaphragm by Professor Kitchen, of this city. It was published by Mr. E. S. Werner, the editor of "Werner's Voice Magazine." Those who will take the trouble of reading this treatise, will find in it a great deal that is interesting and useful for the purposes of articulation teaching.

The part of our vocal apparatus about which I shall speak to you next is the larynx, which performs the important function of changing breath into voice. It is dependent upon our will whether the breath is to pass noiselessly through the larynx, or whether it is to set the vocal chords into vibratory motions and produce voice. We also have it in our power to throw the entire vocal plates into vibrations, or to make their sharp edges only vibrate. It has been ascertained, by direct observation upon the living subject, and by experiments upon removed larynxes, that when the entire vocal bands vibrate, chest notes are always produced, but when the vibrations are limited to the extreme edges of the vocal chords, head notes will be heard. This difference in the mode of vibration, cannot be explained or shown to the little deaf child learning to articulate. But we can let him feel that deep ohest tones produce a much greater vibration of the walls of the chest, whereas a high-pitched voice is accomplished by an elevation of the larynx and by a considerable increase of exertion. Frequently, however, a high-pitched voice in our beginners is caused by muscular weakness, which is overcome in the course of time by practice.

When the breath or voice, as the case may be, leaves the larynx, it has to pass through the pharynx, and from here it may be sent either through the nose or the mouth. This is accomplished by the action of the soft palate. If the breath is to pass through the mouth to be employed in the formation of sounds, the soft palate is drawn back tightly against the posterior wall of the pharynx, so that it shuts off the cavity of the nose. You will observe in this model, that just behind the cavity of the mouth there is a curvature of the spinal column, which makes the pharynx narrower at this point than above or below it. Owing to this curvature, a very slight backward movement of the soft palate is sufficient to completely shut off the nasal cavity and to force the full volume of the breath or voice through the mouth. Insufficient contact between the soft palate and the posterior wall of the pharynx causes the well-known nasal twang. In a number of cases that have come under my observation this imperfect closure and the resulting nasality of the voice were due to swollen tonsils, which impeded the elevation of the soft palate. The difficulty yielded to proper medical treatment, and the voice became purified. Habit is another and quite a frequent cause of nasal tone among our pupils. There seems to be good reason why they should easily fall into that habit. In ordinary breathing for vital purposes, the soft palate rests on the back of the tongue, closing up the mouth passage and permitting the air to pass in and out through the cavities of the nose. In speaking, the soft palate has to be raised. Now, from want of practice, the muscles which are employed in raising the soft palate may lack the requisite strength to perform their function. There are several methods of remedying

nasality of the voice. A very excellent one is recommended by Prof. A. Melville Bell in his "Principles of Speech." The pupil has to place himself before a glass—his back to the light—and try to elevate his soft palate and depress the tongue while pronouncing the open vowels *ah* and *aw*. After some practice, he will be able to maintain the elevation of the soft palate in sounding the close vowels, *ee*, *o* and *oo*, and the tone of his voice will be purified. This remedy is, however, better adapted for older persons than for children. It is rather difficult to make a little child understand exactly what he is required to do in this experiment. I generally employ one that is simple and sure to produce the desired effect. I hold a polished surface, such as a piece of bright tin, a piece of looking glass, or even an ordinary hand slate, before my mouth, and show the pupil, that when I breathe on it through the mouth, only one large spot of moisture appears on it. But if I let part of the breath escape through the nose, two additional small spots of moisture, corresponding to the nostrils will be seen above the large one. Now he is required to practice breathing on the slate while he pronounces the open vowel sound *ah* till his breath produces one large spot of moisture only. After some practice, he will succeed in directing the full volume of his breath and voice through the mouth, as desired.

A Member: The regulation of the pitch of the voice you speak of, is a difficult thing, is it not?

DR. GREENBERGER: Well, there are several methods, but they are not reliable. One method is, if the pupil speaks in too high a tone of voice, you press on the larynx, which relaxes the vocal cords, and the voice becomes low. The higher the pitch of the voice, the greater the tension on the vocal cords. Another remedy is to make the pupil prolong that high pitch of tone, and it will soon be discovered that he cannot do so very long before it will come down.

MR. S. T. WALKER: Regarding the nasal voice. It has been our experience that a child cannot correct himself by eliminating the sound in the way suggested?

MR. GREENBERGER: You must make the pupil understand what the trouble is, and if he sends his breath through the nose, he will eventually avoid it.

MR. CLARK, of Hartford: I desire to say that prolonging the sound is a method I used. Dr. Bell suggests that, when a child makes a squeezed sound, to tire him of it, and thus the voice, which was without control, would come under control. Then, regarding making the child raise the uvula, I think the way is to use the manipulator and put it in the mouth, and when something is put towards it, it goes up voluntarily. Let that be done a few times, and it will do away with the difficulty.

I would like to ask if you have in your school a continuous method of drilling the voice?

DR. GREENBERGER: I have not. I follow the rule to let well enough alone. I used to have exercises, but I discarded them, and I find I have less mismanagement than I used to have. Regarding the practice of the voice in unison, I am not in favor of that.

MR. CLARK, of Hartford: I mean by getting the teacher, by a

series of signs, to indicate the height and length of the voice, as in this way (indicating).

DR. GREENBERGER : I take each pupil individually. It is necessary that the teacher should watch the pupils' utterances very carefully. You cannot get twelve scholars to speak in the same tone of voice, and it therefore makes it difficult.

MR. GORDON, of Georgia : In commencing the class in the method you have shown, do you teach all vowel sounds before teaching them to write ?

DR. GREENBERGER : In the introduction to my paper, I mentioned three subjects, which I have to discuss in this connection. One is the anatomy of the vocal organs ; another the physiology of the speech sounds ; and the third is the general principles of teaching. The question which Mr. Gordon asks comes under the last one, and I would prefer deferring my answer until the subject is reached.

MISS BLACK, of Albany : What did you say regarding the nasal tone, that we should close the nasal passage ? Also what was said immediately following that ?

DR. GREENBERGER : It is as you see here in the position of the model, the nasal cavity is here open.

MISS BLACK : I would like to know if the nasal tone was produced or not by closing the nasal passage ? I heard it said that it was a misnomer to say people talked through the nose, that that was just what they did not do.

DR. GREENBERGER : If they let the breath pass through the nose instead of the mouth, this nasal voice is produced. When you say, for instance, *ah*, this soft palate (indicating) is drawn back and then you can give a pure *ah*.

MR. CLARK, of Hartford : I think you and Miss Black are not thinking of the same thing. I think the nasal sound is caused by the hanging down of the uvula, but you are speaking of the upper closure and Miss Black the lower closure.

DR. GREENBERGER : The lower closure produces the nasal tone and the upper one the clear tone.

MR. HUTTON, of Halifax : I would like Mr. Greenberger to give us an exhibition of the result of his labors with some members of his school.

THE CHAIRMAN : Mr. Pach, the photographer, is present, and wishes to take a picture of a group. All present desiring to have their picture taken, will please go to the west end of the front building.

MR. CLARK, of Hartford : When Dr. Greenberger was speaking of orators, actors, he also spoke of singers, but the interpreter misunderstood the gentleman, and said "sinners." [Laughter.]

Recess was announced from 12 to 2 P.M.

MONDAY AFTERNOON, AUGUST 25.

President Wilkinson called the Convention to order at 2 P.M., and requested the Rev. Thomas Gallaudet, D.D., to open the proceedings.

with prayer. The minutes of the previous meetings were read and approved.

THE PRESIDENT : I will announce the receipt of a letter from Mr. C. Spruitt, in which he states that he is prevented from attending the Convention, owing to sickness in his family. If there be no objection, the letter will be printed with the others already reported.

MR. W. G. JENKINS, of Hartford : I beg leave to present the following report of the Committee on Membership and Enrollment.

REPORT OF COMMITTEE ON ENROLLMENT.

ALABAMA.—J. H. Johnson, Principal ; S. J. Johnson.

Honorary Member.—J. B. McMillen.

AMERICAN ASYLUM, HARTFORD, CONN.—Dr. Job Williams, Principal ; Dr. G. O. Fay, Abel S. Clark, W. G. Jenkins, Geo. F. Stone, John E. Crane, W. H. Weeks, Lucy S. Williams, Flora L. Noyes, Elizabeth Fay.

Honorary Members.—Mary E. Atkinson, Alice S. Williams, Robert D. Beers, Mary J. Smith.

ARKANSAS.—F. D. Clarke, Principal ; S. C. Bright, John H. Geary, J. W. Michaels, Emily A. Wells, Mrs. L. K. Clarke, Mrs. I. H. Carroll, Kate P. Brown, S. H. Devereux.

Honorary Members.—Mrs. F. D. Clarke, Annie L. Carroll, Mrs. J. W. Michaels, U. G. Dunn, S. L. Leavenworth.

CALIFORNIA.—Dr. Warring Wilkinson, Principal.

Honorary Member.—Douglas Tilden.

CANADA, BELLEVILLE, ONT.—R. Mathison, Superintendent ; D. R. Coleman, James Hadden, Sarah Templeton, Florence Maybee, Euphemia Terrill, Melissa M. Ostrom, Annie Mathison, William Nurse.

Honorary Members.—Belle Mathison.

CANADA (MACKAY INSTITUTION), MONTREAL.—John I. Ashcroft, Superintendent ; Mrs. J. I. Ashcroft, Lady Superintendent.

CANADA (HALIFAX INSTITUTION), N. S.—J. Scott Hutton, Principal ; S. H. Lawrence, A. Minnie Mosher, R. Wilkie McDonald.

Honorary Member.—Mrs. J. Scott Hutton.

CHURCH MISSIONS.—The Rev. Thomas Gallaudet, D.D., Rev. John Chamberlain, Rev. A. T. Colt, Rev. Job Turner, Rev. A. W. Mann, Rev. J. H. Cloud.

CATHOLIC MISSION.—The Rev. A. Belanger, C.S.V.

CLARKE INSTITUTION, MASSACHUSETTS.—Caroline A. Yale, Principal ; Fannie W. Gawith.

Honorary Members.—Harriet B. Rogers, Edna J. Howes.

COLORADO.—John E. Ray, Superintendent ; Geo. W. Veditz.

DELAWARE.—Mary E. Hoopes.

FLORIDA.—Park Terrell, Principal.

Honorary Member.—Mrs. Park Terrell.

GEORGIA.—W. O. Connor, Principal ; Mrs. W. O. Connor, C. W. Wright, F. M. Gordon, Teacher in Colored department.

Honorary Member.—Mrs. C. W. Wright.

ILLINOIS.—Dr. Phillip G. Gillett, Superintendent; H. C. Hammond, David D. Smith, Mary E. Peek, Lavinia J. Eden, Alma Gillett, Eliza Kent, Helen W. Wait, Annie C. Tanner.

INDIANA.—S. J. Vail.

Honorary Members.—Mrs. S. J. Vail, Lizzie M. Vail.

INDIANA (EVANSVILLE DAY SCHOOL).—Charles Kerney, Principal; Emma Macy.

Honorary Member.—Mrs. Charles Kerney.

IOWA.—Conrad S. Zorbaugh, D. W. McDermid, John W. Barrett, Florence Wilcoxson.

KANSAS.—S. T. Walker, Superintendent; Charles L. Zorbaugh, Eva L. Owen.

KENTUCKY.—W. K. Argo, Superintendent; M. T. Long, G. M. McClure, Augustus Rogers, Mrs. Annie W. Rogers, Martha A. Stephens, Stella P. Yost.

Honorary Members.—Mrs. W. K. Argo, Mrs. Mary Dudley.

LOUISIANA.—Edith Rambo.

MAINE.—Ellen L. Barton, Principal of Portland Day School for the Deaf.

MARYLAND.—Charles W. Ely, Principal; Charles M. Grow, Edward P. Gale, Rosa R. Harris, Annie B. Barry, Mary McGuire, Julia M. Young, Kate H. Fish, Laura C. Yerkes.

Honorary Members.—Wm. R. Barry, Vice-President of Board of Directors; Mrs. Emily Bokee Rogers, J. B. McGann.

MARYLAND (Colored School).—James S. Wells, Principal; Daniel P. Moylan.

Honorary Member.—A. J. N. Terrier.

MASSACHUSETTS, BEVERLY SCHOOL.—Nellie H. Swett, Principal; Lucy M. Swett.

Honorary Members.—Mrs. M. H. Swett, Geo. T. Sanders.

MICHIGAN.—M. T. Gass, Superintendent; Geo. W. Cook, Thomas Monroe, Willis Hubbard, J. J. Buchanan, Helen L. Palmer, Maggie T. Bennett, Jessie B. Barney, Ida M. Jack, Marion E. Tyrrell, Adelaide Hendershot.

Honorary Members.—Mrs. M. T. Gass, A. F. Birdsall, Mrs. S. R. Jones.

MINNESOTA.—Dr. J. L. Noyes, Superintendent; Mrs. Alice W. Smith, D. F. McClure.

Honorary Member.—Mrs. J. L. Noyes.

MISSISSIPPI.—J. R. Dobyns, Principal.

Honorary Member.—Mrs. J. R. Dobyns.

MISSOURI.—J. N. Tate, Superintendent; D. C. McCue, C. M. Grow, Jr., H. E. Walker.

NEBRASKA.—T. F. Moseley, W. E. Taylor, Adda McClure, Grace S. Zorbaugh.

Honorary Members.—G. D. Moseley, John A. McClure.

NEW YORK.—Dr. Isaac Lewis Peet, Principal; Enoch Henry Currier, Thomas F. Fox, William G. Jones, Walter B. Peet, Charles W. Van Tassel, Chester Q. Mann, Edwin A. Hodgson, Ida Montgomery, Jane T. Meigs, Luann C. Rice, Myra L. Barrager, Elizabeth M. Stryker, Emily McAllister, G. Mariella Le Prince.

Honorary Members.—Rev. Thomas Gallaudet, D.D., Benjamin H. Field, Avery T. Brown, Chauncey N. Brainerd, Dr. W. T. Alexander, Geo. P. Greenleaf, George T. Newell, Jr., Theodore Peet, G. C. W. Gamage, George S. Porter, John A. Malledy, William Slattery, E. R. Fay, Lawson N. Fuller, Geo. B. Curtiss, Dr. W. E. Porter, Wilson L. Gill, W. O. Fitzgerald, A. A. Barnes, C. K. W. Strong, A. Capelli, Peter P. McLaughlin, Samuel W. McClelland, Washington Houston, F. H. King, Mrs. Susan L. Henry, Prudence Lewis, Myra M. Long, Mary Mont-

gomery, Mrs. Mary E. Totten, Mrs. I. L. Peet, Elizabeth Peet, Mrs. T. F. Fox, Mrs. W. G. Jones, Mrs. C. Q. Mann, Mrs. E. A. Hodgson, Beatrice Hodgson, Mrs. W. T. Alexander, Madame Le Prince, Mrs. L. N. Fuller, Mrs. E. R. Fay, Gertrude Walter, Mrs. C. K. W. Strong, Kate Blauvelt, Sadie C. Howard, Florence H. Jones, Mrs. H. W. Style, Mrs. George E. Maltby, Madge Maltby, Mrs. J. G. Wilson, Mrs. John W. Lake, Dora Vosseller, Clara Post, Mrs. W. Houston.

NEW YORK (WESTERN).—Z. F. Westervelt, Principal ; Amy M. Hodges, Harriette E. Hamilton, Carrie D. Wood.

Honorary Members.—Edmund Lyon, Frances W. Wood, Carolyn Perkins.

NEW YORK (INSTITUTION FOR IMPROVED INSTRUCTION).—David Greenberger, Principal ; E. S. Thompson, F. W. Nuboer, Mrs. O. H. Morley.

NEW YORK (CENTRAL).—F. L. Seliney (Acting Principal), Wm. M. Chamberlain, Albert P. Knight, J. E. Story, J. H. Eddy, T. H. Jewell, Edith Terrill.

Honorary Members.—Mrs. J. H. Eddy, Martin R. Minkle, Mrs. Samuel W. McClelland, Mrs. Robert Patterson.

NEW YORK (NORTHERN).—H. C. Rider, Superintendent ; Alphonso Johnson, George L. Reynolds, Emma P. Harris.

Honorary Members.—Mrs. H. C. Rider, Mary Semple.

NEW YORK (ST. JOSEPH'S), FORDHAM.—Mary B. Morgan, Superintendent ; N. Frances O'Connor, Mary Franklin, Annie M. Larkin, Mary Flaherty, M. J. Purtell, Adele George.

NEW YORK (LE COUTEULX ST. MARY'S).—Sister Mary Ann Burke, Principal ; Sister Mary Dositheus.

Honorary Members.—Rev. P. S. Dunne, Sara C. Dunne.

NEW YORK (ALBANY HOME SCHOOL).—Anna M. Black, Principal.

Honorary Member.—Edward A. Groesbeck.

NEW JERSEY.—Weston Jenkins, Principal ; R. B. Lloyd, Frances C. Hawkins, Virginia H. Bunting, Elizabeth C. Snowden.

Honorary Members.—Mrs. Weston Jenkins, Mrs. R. B. Lloyd, Peter Gaffney.

NORTH CAROLINA.—W. J. Young, Principal ; E. McK. Goodwin, D. R. Tillinghast.

Honorary Members.—D. W. Bain, Una Bailey, N. Young.

OHIO.—R. H. Atwood, R. P. McGregor, Clarence W. Charles, Albert H. Schory, Luetta Kinney, Ella A. Zell, Le'Once Odebrecht,

Honorary Members.—Mrs. R. H. Atwood, L. E. Atwood.

OHIO (ORAL SCHOOL).—Virginia Osborn, Principal.

PENNSYLVANIA.—A. L. E. Crouter, Principal ; (Manual Department)—F. W. Booth, G. L. Weed, Wm. A. Caldwell, John P. Walker, E. G. Hurd, J. T. Elwell, S. G. Davidson, Kate Barry, Mary Divine, Lizzie R. Taylor, Julia A. Foley, Effie Johnston, Cora Johnston, Phebe J. Wright, Emma Lewis, Annie B. Boyer, Mrs. E. G. Hurd ; (Oral Department)—Florence C. McDowell, Susan E. Bliss, Emma F. West, Mattie H. Bedford, Emma R. Thompson, Maud I. Griffeth, Constance C. Newton, Ella Dawson, Mary B. Shaw.

Honorary Members.—Lee Foster, Mrs. Wm. A. Caldwell, Lizzie Foley, Lucy Baldwin.

PENNSYLVANIA (WESTERN).—Linnæus Roberts, W. J. Stewart, G. M. Teegarden, J. C. Balis, Minnie F. Smith, Maria P. Orr, Jennie L. Cobb.

Honorary Members.—Mrs. Linnæus Roberts, Mrs. J. C. Balis, Mrs. G. M. Teegarden, L. K. St. Clair.

PENNSYLVANIA (ORAL SCHOOL), SCRANTON.—Jeannette Christmas, Minnie Powell.

RHODE ISLAND SCHOOL.—Laura DeL. Richards, Principal; A. Evelyn Butler, Fannie D. Gladding.

SOUTH CAROLINA.—N. F. Walker, Superintendent; T. H. Coleman, Georgie Decker.

TENNESSEE.—Thos. L. Moses, Principal; L. A. Houghton, Bettie Davis.

TEXAS.—W. A. Kendall, Superintendent; Frankie Pasquelle, Emily Lewis.

VIRGINIA.—G. D. Euritt.

Honorary Member.—Mrs. G. D. Euritt.

WASHINGTON, D. C., NATIONAL COLLEGE.—E. M. Gallaudet, LL.D., President; E. A. Fay, Ph.D., Amos G. Draper.

KENDALL SCHOOL.—James Denison, Principal.

Honorary Members.—Dr. A. Graham Bell, Mrs. E. M. Gallaudet, Mrs. A. G. Draper, Mrs. Elizabeth L. Denison, John Hitz, Olof Hanson.

WEST VIRGINIA.—C. H. Hill, Principal; A. D. Hays, E. L. Chapin, Agnes Grimm.

Honorary Members.—Mrs. A. D. Hays, Mollie Pickens, Hoppie Keller, S. Chapin.

WISCONSIN.—J. W. Swiler, Superintendent; W. A. Cochrane, B. T. Bensted, W. F. Gray, Almira I. Hobart, Iva C. Pearce, Eleanor E. McCoy, Annie M. Gray.

Honorary Members.—Geo. C. Swiler, Sarah D. Gibson.

WISCONSIN (LA CROSSE SCHOOL).—Viola Taylor, Principal.

DELEGATES AT LARGE.—E. W. McGann, New Jersey; Josephine Felix, New Jersey; S. E. Tallman, New York; Mrs. C. E. Lounsbury, New York; Mary H. True, Maine; Mattie F. Metcalf, Massachusetts; M. B. Nettleton, Connecticut; Rev. and Mrs. Samuel Rowe, Massachusetts.

DR. PEET: I move that the reading of the report be omitted; that the roll of members be left with Mr. C. N. Brainerd; and that the Principal of each Institution be requested to examine the names of representatives credited to his Institution, and to make such alterations as may be necessary.

THE PRESIDENT: If there be no objection, it is so ordered. The report of the Standing Executive Committee is now in order.

DR. E. M. GALLAUDET: *Mr. President:* The Standing Executive Committee, since the meeting of the convention in California, has held five meetings. The first, was held at California after the re-appointment of the Committee, and at that meeting the editor of the *Annals* was authorized to prepare blanks for the correct preservation of the records of the deaf. You will all remember that those forms have been published in the *Annals*. Speaking of the fact, I desire to direct attention to the great desirability of the general adoption of these blanks in the several schools for the deaf. I am informed by the editor that eight or ten schools have adopted them, and it is to be hoped that others will follow as soon as possible. Those desiring blanks can communicate with the editor of the *Annals*, and they will be supplied. The desirableness of keeping such records in the various schools need not be dwelt on at the present time.

The second meeting of the Committee was held at this Institution, March 5th, 1887. The only action of special importance was the acceptance, with the sincere regret of the Committee, of the resignation of Miss Rogers, who at that time retired from her position as principal of the institution at Northampton.

Miss Yale, who had succeeded Miss Rogers at Northampton, was chosen to fill her place on the Committee.

The next meeting was held on the 16th of April, 1888, at Jackson, Miss. At that meeting, action was had looking towards the carrying out of a resolution of the Conference of Principals that authorized the Committee to take up the matter of the census of the deaf in connection with the United States Census of 1890. Dr. Alexander Graham Bell and Dr. Frederick H. Wines were added to the Committee for the consideration of this subject.

The next meeting was at Washington, on the 9th of May, 1889, and was held especially to arrange for a correct and full taking of the census of the deaf. The Committee had the pleasure of the presence of Dr. Bell. Dr. Wines was absent, but sent suggestions. Mr. Porter, Superintendent of the Census, met the Committee, and also Dr. John S. Billings, who had been appointed to take charge of certain special classes, including the deaf. A full consultation was had, and I am happy to say that the Superintendent of the Census accepted readily several important suggestions made by the Committee. After that meeting, the sub-committee, consisting of Dr. Bell, Dr. Fay and myself, had in hand the preparation of blanks for the use of the Superintendent of the Census, which were practically adopted with few modifications. So it is to be hoped that the census taken will prove satisfactory.

Since the last formal meeting of the Committee, certain matters have been arranged by correspondence. At the meeting of May 9th, 1889, in Washington, it was decided that the Convention be held in New York in the summer of 1890, the invitation from this institution being accepted. After that, certain considerations, with which you are familiar, and the probability of the World's Fair being held in New York, in 1892, led the Committee to decide that the Convention be postponed until 1892, and there were some efforts made to arrange for a meeting of the principals this year; but not long thereafter the action of Congress decided that the Fair would not be held in New York, in 1892, but one would be held in Chicago, in 1893. So the Committee soon after concluded to have the Convention here this summer, the invitation of the New York Institution having been renewed.

I think the members of the Convention will pardon me if I say a word further regarding this matter. They will remember that in the institution papers many opinions were expressed. A great deal of good advice, and some perhaps not so good, was offered. Some thought that the members of the Executive Committee were asleep, while others were afraid they would not do the right thing, and a good many other things were said, all addressed to the public. I should like to say to the members of the Convention that during all that discussion, which was somewhat excited and heated at the time and certainly interesting, but one communication was addressed to the Chairman of the Ex-

ecutive Committee. Nobody wrote to him, except one person, asking what was the matter, or how things were coming on. He was supposed, I presume, to read carefully all institution papers, and every thing said *pro* and *con* in reference to the Convention. This he did not have time to do, but with the effective co-operation of the members of the Committee the present Convention was arranged for, and seems likely to be as successful as any that have preceded it.

NEW YORK, August 23, 1890.

DR. E. M. GALLAUDET, *Chairman of the Executive Committee of the Convention of American Instructors of the Deaf:*

SIR:—I respectfully submit a summary of my receipts and disbursements, as Editor of the *Annals*, since the last Convention of American Instructors of the Deaf:

Receipts.

From balance on hand July 15, 1886.....	\$1,132 13
“ assessments on institutions.....	5,881 65
“ individual subscriptions.....	855 10
“ sale of back volumes and numbers	276 08
“ advertisements.....	82 00
“ sale of reprinted articles.....	21 00
“ sale of registration blanks..	183 75
Total.....	<u>\$8,431 71</u>

Disbursements.

For printing and engraving.....	\$3,931 28
“ salary of editor.....	1,600 00
“ articles of contributors.....	802 76
“ postage, expressage, stationery, etc.....	315 46
“ travelling expenses.....	479 29
“ back volumes	5 82
Balance on hand August 23, 1890.....	\$1,297 60
Total.	<u>\$8,431 71</u>

I submit also for the examination of the Committee the book containing the *Annals* account with the editor, which shows all my receipts and disbursements in detail; also vouchers for all disbursements since the last meeting of the Executive Committee.

The annual assessments on the institutions have been paid in full by the following institutions:

American.....	\$ 63 60	Le Conteulx St. Mary's	20 00
New York.....	131 20	Minnesota.....	33 60
Pennsylvania.....	126 80	Clarke.....	26 00
Ohio.....	100 00	Arkansas.....	18 40
Kentucky.....	30 00	Nebraska.....	15 60
Virginia.....	33 60	West Virginia.....	25 60
Indiana.....	121 20	Maryland, Colored....	4 80
Illinois.....	141 60	St. Joseph's.....	76 00
Georgia.....	14 40	Colorado.....	16 00
South Carolina.....	9 60	Western Pennsylvania.....	30 00
Iowa.....	40 00	Western New York.....	24 00
Mississippi (since Jan., 1889) ..	14 00	Central New York.....	30 00
Texas.....	24 00	Rhode Island (since Jan., 1887) ..	10 00
Columbia.....	50 00	Halifax (except for 1887).....	14 80
California.....	26 80	Ontario.....	99 60
Kansas.....	33 20		

The assessment is at the rate of 40 cents a pupil annually, and is based upon the number of pupils actually present in the institutions on the first of December, 1876, except in the American Asylum, and the New York and Ohio Institutions, whose pupils have been reduced in number since that date, and whose assessment is correspondingly reduced, and several of the younger institutions which, at that time, had not yet come into existence or had not yet assumed their share of the support of the *Annals*, whose assessment is based upon the number of pupils present when their assessment was begun.

The following institutions have paid less than their assessments, receiving a proportionally less number of copies of the *Annals* :

INSTITUTIONS.	Amount of Annual Assessment.	Amount Paid.
North Carolina.....	\$54 80	\$20 00
Maryland.....	36 00	25 00
Oregon.....	10 40	6 00

The Louisiana, Missouri, Wisconsin, Michigan, Alabama, New York Improved Instruction, New England Industrial, Dakota, Pennsylvania Oral, New Jersey, Utah, Northern New York, Florida, New Mexico, Washington State, Texas, Colored, New Brunswick, Manitoba, and the private, denominational, and day schools have not contributed to the support of the *Annals*, except in some cases by subscribing for several copies.

In addition to the regular publication of the *Annals* during the past four years, Volume IX, which was out of print and was needed to fill orders for back volumes, has been reprinted and supplied to the institutions in due proportion to their assessments. Blank forms for the collection and registration of school statistics, in accordance with the recommendation of the Conference of Principals, have been printed and furnished at cost to such institutions as desired them. From the income of the *Annals* have also been paid the travelling expenses of the members of the Executive Committee and the editor in attending meetings of the Committee, and some expenses incurred in arranging for the Eleventh Convention of Instructors and the Sixth Conference of Principals.

Respectfully submitted,

E. A. FAY, *Editor*.

MR. S. T. WALKER : I move that the report be accepted and placed on file.

THE PRESIDENT : It has been moved and seconded that the report of the Standing Executive Committee be accepted and placed on file. If there be no objection, it is so ordered.

MR. HAMMOND : I move that the same members of the Executive Committee be re-elected until the meeting of the next convention.

The motion was seconded.

THE PRESIDENT : A motion has been made and seconded that the same members of the Executive Committee, who have served for the last four years, be re-elected to serve for the coming four years. The names of the former committee are E. M. Gallaudet, Chairman ; I. L. Pect, of New York ; P. G. Gillett, of Illinois ; J. L. Noyes, of Minnesota ; and Caroline A. Yale, of Massachusetts.

MR. HAMMOND : The wording of the Chair was for four years, while my wording was until the next meeting of the Convention.

MR. MONROE : In view of the fact that a strong sentiment is known to exist among a large majority of the members of this Convention in favor of a change in our organization, I move you, Mr. Chairman, that for the present the motion be laid on the table.

MR. HAMMOND : I am not aware that any such proposition has been made to the Convention.

MR. MONROE : The matter was spoken of merely as the reason for making the motion, and the reasons, clearly, are not a part of the motion, "To lay on the table," which is the only question to be now voted upon.

THE PRESIDENT : Is the motion seconded?

The motion was seconded.

THE PRESIDENT : You have heard the motion of Mr. Monroe to have Mr. Hammond's motion for the re-election of the present Committee temporarily laid on the table.

MR. G. O. FAY : I would suggest that our present Executive Committee, who have faithfully served us, and won our confidence, and who are perfectly willing to carry out the wishes of the Convention, be re-elected now, and if there are any modifications of policy to be considered and acted upon, they can receive attention afterwards.

MR. SWILER : I trust the proposition to table Mr. Hammond's motion will not prevail in view of the fact that the convention is not cognizant of the organization spoken of.

DR. E. M. GALLAUDET : I think my standing in the convention is such as to prevent any one from thinking I am speaking in my own interest. I am not a candidate for re-election, and, personally, have no objection to the proposed postponement, but I must say I consider it entirely out of parliamentary order to depart from the practice which has been in vogue for years in this body, on the mere assertion that certain members propose to do something. My inquiry is to know if such a proposition has been brought before the convention, whether such a scheme has been presented to the convention. If, as I suppose, this has *not* been done, it seems to me entirely out of order to present this motion now, simply because certain members are going to propose certain things we know nothing about.

MR. MONROE : I trust that gentleman will not misunderstand my motive in making this motion. For one, at some future time during this convention, I should and would hold up both hands for the appointment of those designated in the motion, as the Executive Committee of the Association of American Instructors of the Deaf.

In his remarks before this convention, Dr. Gallaudet, Chairman of the Executive Committee, informs us that during all the recent expressed dissatisfaction and discontent with the official acts of the committee regarding the time of holding this convention, but one letter from any of those interested and dissatisfied was addressed to the committee; all views upon the matters being expressed through the public press. The members of the committee then must read all of the papers, which time would not permit them to do, in order to find out what the members of the organization desired them to do.

This I will venture to say, in the opinion of a majority of the members of this convention, is not as it should be; it is not justice to the committee, nor does it reflect creditably upon the organization. Under the circumstances, no one can deny the right of the press to make the comments and criticisms to which reference is made, since the discus-

sions arose through misunderstanding and disagreement as to the powers and duties of the committee. It does not seem to be justice to the members of this body, to require each, by personal letter to the committee, to make known his wishes regarding convention matters. The sentiment, among a majority of the members of this convention, to which I referred, is, that by a majority of the members in convention assembled, the wishes of this body regarding this, and all other matters relating to conventions of American instructors of the deaf, should be definitely determined and *expressed in writing*. It would hardly seem to be business-like, or just to the committee to appoint the members of it first, and then go about it and make their powers and duties different from what they had a right, at the time of the appointment and their acceptance of the trust, to suppose those powers and duties to be. There are many who would vote against adding or taking away any powers or duties of a committee after they had been appointed.

The reasons, however, are entirely outside of the motion, and from its very nature, could not, by any manner of means, form any part of it whatever, and, according to parliamentary usage or any standard rules of order, the motion, exactly as it has been presented, to lay the principal motion on the table, is certainly in order at this time. Under the circumstances, I now withdraw the motion.

DR. E. M. GALLAUDET : I have had the honor of being chairman of this committee twenty-two years, and I have never had reason to suppose that the committee has at any time failed to carry out the wishes of the Convention.

MR. DOBYNS : Before that motion is put, I would like to offer an amendment, and I hope I will not be misunderstood by this Convention. I come from Mississippi, and I do not desire any one to think I want to draw a sectional line, for I can shake the hand of my Northern brother as fervently as I can of those of my own section.

The East, North, and West, are all represented on this committee, but the South and our sister Canada have no representation, and I do not believe they ever had.

We are as much interested in this Convention as any part of our country, and I do not see why we should not have a voice in this Executive Committee. I have no objection to any member of it, and I would willingly vote to continue them in office for the balance of my life ; but I want to amend the motion by adding two more members to that Executive Committee, one from the South and one from Canada.

I move that Mr. Hammond's motion be amended, by adding the names of Mr. W. O. Connor, of Georgia, and Mr. R. Mathison, of Belleville, Canada, to the Executive Committee of this Convention.

THE PRESIDENT : You have heard the motion. What is your pleasure ?

MR. DOBYNS : If there is any objection, I wish the members of the Convention would state it. If there is any good reason why the committee should not be enlarged I would not press the point, otherwise I shall insist upon my amendment.

DR. E. M. GALLAUDET : There are two points to be considered, one

is the additional expense of getting the committee together, and the other is the larger the committee the greater the difficulty in securing a quorum.

DR. GILLETT : I do not feel that those objections are serious, and, for my own part, I would be glad to have the pleasure of the presence of those gentlemen on the committee should I be honored with reelection, and I do not see any objection to thus enlarging the committee.

MR. DOBYNS : It may be adding to the expense, but I desire to say we cheerfully bear our share of it, and we do feel we should have a voice in the Executive Committee. I have not spoken to any body about this matter ; it is my own motion entirely, and I take the responsibility of offering the amendment, and I trust it will be adopted.

THE PRESIDENT : The motion is seconded. I think Canada has been represented before, but, of course, all sections of the country are not, however, represented now—take the great Pacific Slope, for instance. I am sure that California will be glad to bear its share of the expense.

MR. HILL : I desire to amend the amendment by adding the name of Dr. Wilkinson, of California.

THE PRESIDENT : That would entail more expense, and it would not be right.

DR. WILLIAMS : The larger the committee the more difficulty in getting them together. I would like to see every State represented, but that is impracticable. It seems to me that the committee is already large enough to work to the best advantage.

MR. ELY : It seems to me the difficulty of enlarging the committee is not a serious one. A quorum of the committee could certainly be got together, and the opinions of the absent members could be given if they were not present, and it seems to me they ought easily be added to accommodate all.

MR. W. JENKINS, New Jersey : Suppose the committee name its own quorum.

MR. DOBYNS : No objection to that ; if our representatives do not get there, we lose nothing. It might be well to incorporate in the resolution that three of the members shall constitute a quorum. It has been found extremely convenient for all to be present. But I think three of these members might be considered a quorum and thus obviate the objection, and when there is a likelihood of matters coming up, the others can express their views by correspondence, and I think three members could do the business without breaking any law.

I offer that amendment to Mr. Hammond's motion; that the names of Mr. W. O. Connor, of Georgia, and Mr. R. Mathison, of Ontario, be added to the Executive Committee ; and that three of this committee shall constitute a quorum.

DR. GILLETT : The difference is that instead of four making a quorum, it now would continue to be but three. I move that that portion of the motion be laid on the table, and leave the matter of a quorum as it is at present—namely, a majority of the committee.

MR. DOBYNS : If Mr. Hammond withdraws it, I am satisfied.

DR. GILLETT: I do not believe it would be wise to make three members a quorum of the committee. Should we do so, there would probably be no full meetings of the committee, because to the three living nearest together would be left the holding of all meetings, since the presence of others would not be necessary, and practically, instead of enlarging the committee, we would reduce it.

THE PRESIDENT: Does Mr. Dobyns omit that portion of his amendment?

MR. DOBYNS: I will leave it as it is, and let the convention decide.

THE PRESIDENT: Does the convention move to amend?

DR. J. L. NOYES: Notice having been given to all the committee, four can stay away and three must come; we want, at least, three to get together. Certainly there would be no quorum unless all were notified, and if the four did not come, three would; but under Dr. Gillett's proposal, if four did not come and three did, they would then have to go home again.

MR. SWILER: It seems there is not a practical business point in Dr. Gillett's amendment, and I propose that Mr. Dobyns' amendment be adopted, that three constitute a quorum.

MR. CROUTER: I think it would be well to let the committee decide whether the quorum should be three or four.

THE PRESIDENT: Mr. Dobyns proposes that the names of Mr. Connor and Mr. Mathison be added to the Executive Committee, now consisting of five, and that three members of the committee so organized shall constitute a quorum: that is the question to be voted on.

MR. S. T. WALKER: I think a majority ought to be a quorum. I do not think that the importance that seems to call for a larger committee than five should be disorganized by practically reducing the number to three by any amendment. The past has shown that frequent meetings of the committee are not essential to transact their business, and I am in favor of following the custom of requiring a majority to constitute a quorum, in order that the desire of the mover of the resolution to increase the sectional representation of the committee may be operative in its effect.

Were three members made a legal quorum, it would be an easy matter, if such a thing were desired, for the chairman to call frequent meetings and pass upon important matters, with but the two members present, who live within a comparatively short distance of Washington. For my part, I should prefer that the committee meet less frequently, and transact business after mature deliberation, and with every member present.

MR. TERRILL, of Florida: I also think it should be left to the committee to make their own quorum. If four constituted a quorum, it would be more of an incentive for them to get together and attend the meetings than if the quorum be smaller. I may be mistaken, but I think four would be better.

MR. S. T. WALKER: I thought the motion to lay Mr. Dobyns' motion on the table had reference to the quorum of the committee, and not to adding the names of the gentleman from Georgia and the gentleman from Ontario. I think the motion should be divided. I wish

to vote to add these names to the committee, but I do not favor less than a majority as a quorum. Let us have no "omnibusing."

MR. DOBYNS : I desire to withdraw that part of the motion, and make it read that these two gentlemen be added to the committee. [Cries of Question ! Question !]

THE PRESIDENT : The motion is to add Mr. Connor's and Mr. Mathison's names to the Committee. All those in favor of the motion will signify the same by raising the hand. Those opposed will signify by uplifted hand. The motion is carried.

THE PRESIDENT : Now, then, as to Mr. Hammond's original motion, that, with these two additional names added, the Executive Committee be re-elected until the meeting of the next convention. All in favor of this motion will signify the same by uplifted hand. All opposed will signify the same by raising the hand. The motion is carried.

DR. WILLIAMS : I desire to present and move the adoption of the following resolutions.

WHEREAS, The conviction has arisen in the minds of many that more frequent meetings of this Convention would add to its interest and profit ; and,

WHEREAS, The attendance has increased to such an extent as to make its entertainment a serious tax upon the few institutions capable of entertaining it ; therefore,

Resolved, That a committee consisting of the following persons, namely, Dr. E. M. Gallaudet, Dr. P. G. Gillett, Dr. G. O. Fay, Mr. A. L. E. Crouter, Mr. F. D. Clarke, Mr. John W. Swiler, and Mr. S. T. Walker, be appointed to formulate such plan as in their judgment may seem necessary for the improvement of our present organization :

Resolved, That this Committee report before the adjournment of this convention.

MR. CROUTER : I second the resolutions and the motion.

DR. PEET : I move that Dr. Job Williams' name be added to the list.

DR. GILLET : I move to add the name of Miss Ellen L. Barton.

THE PRESIDENT : You have heard the resolutions and the motions, What is your pleasure ? All in favor of the adoption of the same will manifest it by raising the hand. Those opposed, by the same sign. They are unanimously carried.

MR. W. G. JONES, of New York : I move that, as the Gallaudet Home Excursion will be on Wednesday next, the business of this convention shall be suspended for that day, in order to give the members an opportunity to attend, and at the same time they will know they are helping a most worthy charity.

MR. C. W. ELY : I move to amend that motion as follows :—That the thanks of the convention are extended for the kind invitation received, and that while some of our members will be happy to accept, it will not be expedient to suspend the order of our proceedings. While we are all in hearty sympathy with the good work of the Home, and appreciate the invitation, yet I hardly think it expedient to suspend the proceedings of our convention. I move that our thanks be extended for the kind invitation, and hope the amendment will be adopted.

DR. GILLET : I hope that the amendment will be carried. The excursion is one that will certainly meet with the hearty approval of all, and I hope every one will buy a ticket, but I don't think it wise to adjourn the convention over.

THE PRESIDENT : You have heard the amendment, or substitute, to Mr. Jones' motion offered by Mr. Ely, that the thanks of this convention be extended for the kind invitation received, and that while some members will accept, yet it will not be expedient to adjourn the convention. All those in favor of the motion as amended, will signify it in the usual way. Those opposed, by the same sign. It is carried.

THE PRESIDENT : We will now take up the regular programme of the afternoon. There will be three papers presented : the first by Prof. Thomas Monroe, of Michigan ; the second by Dr. Isaac Lewis Peet, of New York ; and the third by Prof. W. G. Jones, of New York.

ADVANCEMENT IN METHODS OF INSTRUCTING THE DEAF.

By Thomas Monroe, of the Michigan Institution.

The past half century has witnessed improvements in methods of instructing in the public schools, which to those competent to judge seem no less deserving of commendation than the wonderful inventions in other directions which have within the same time been brought out for man's use and comfort. Hardly a trace of the methods of instruction employed in the public schools of fifty years ago remains to-day, they having been supplanted by more practical and more effectual ones ; we, therefore, do not wonder when we hear the men and women of to-day deplore the fact that their school days could not have been spent under such systems as are now in vogue. Let us take a glance at a primary room found in any well-regulated school of the present time, and in imagination place beside it a primary room of twenty-five years ago. The room of the present day is decorated with paper designs of the most beautiful colors, these ornaments having been made during school hours by children who have been in school for from one to two years ; on the window-sills are clay houses, clay apples, pigs, dogs, marbles, etc., all wrought by the hands of the same little artists. Do we ask ourselves if this is as it should be ? What ought a school-room for little children to be like ? Ought it to be like a State prison, or something approaching more nearly a child's playhouse where children will love to go and where they will become interested ? How should the time of such children be spent in school ? But very little of it can be spent in study, and the question is, Shall they be set to work at something, which they can do and in which they will be interested, or suffered, through idleness, to drift into mischief which calls forth punishment ?

If we remain in this room long enough, we will see that the teacher frequently gives the children exercises in calisthenics, or some other form of recreation. She has learned that children cannot sit still

for an hour and a half at school any better than they can at home. Frequently the children are allowed a few minutes to play the games in which it is child-nature to indulge. All this operates to prevent the children from doing the same things of their own accord by deceiving the teacher.

The primary room of twenty-five years ago was decorated by a small tree of birch switches, which the teacher was wont to use, should a child even attempt to draw a picture on his slate. The children were expected to study all the time, whether they knew how to do so intelligently or not. Should they learn a lesson before it was time for them to be dismissed, they were either asked to sit erect with arms folded, a position, by the way, which all children love to assume, or else were prematurely sent home. The methods of instruction were directly in keeping with the rest of the school management.

In primary grades, students are now made of children, who, under the old system, would have become truants. How about the more advanced grades? In the past, grammar was taught by placing in the hands of the child a text-book, and requiring him, at first, to commit to memory, to him, meaningless rules and definitions; and later analysis and parsing was given, with no reference to practical use or application. Not until the child was about ready to leave school, was he required to express his thoughts in words, and then, so frightened was he at the thought of a composition, that some kind friend was importuned to come to his assistance that he might pass the ordeal creditably. In making practical use of language, the graduate was but little in advance of the beginner.

Nowadays, language training begins almost the very day that the pupil enters school. From expressing a single thought in a single simple sentence, he is led, step by step, through writing short, simple stories, to the most difficult forms of composition. The present methods of instructing the hearing in language are, very wisely, approaching more nearly to the methods under which the deaf are instructed.

We cannot dwell to compare methods past with methods present, of teaching all the other branches, yet, right here, let us note that improvements in educational methods have kept pace pretty well with the march of progress in other lines; that as the railroad is a swifter and and better means for travel than the stage coach, so the present methods of instruction excel the old ones.

How has this improvement been made? By those in the work not being content, but continually searching for a better way while in the schoolroom, and by the interchange of ideas outside of the schoolroom.

There have not been as material general changes within the same period in methods of instructing the deaf, nor has it been clearly demonstrated that similar changes are either possible or necessary in our work. We nevertheless see great need for improvements in our methods, but the question still is, Is the desired better way attainable? Let us for a few moments contemplate wherein the education of those under our care, if possible, could be improved by different and more effective ways and methods of instruction. At the outset, let us not fall into the error of pointing to the deaf people in this assemblage, or to the many others who have made their mark in the world, as a cri-

terior of what our system is doing for the deaf. Those who are with us to-day, we know do not come from among the average pupils, but are the bright ones, the very bright ones, if you please.

There are dismissed from schools for the deaf each year a great many pupils who are unable to read books and newspapers, and who are liable to mistakes in expressing thought, even in the simplest forms. These children, instead of continuing their education after leaving school, must necessarily degenerate, and should they visit the school ten years hence, we will find that even what they had learned has been forgotten. There are schools for the deaf where the number of pupils commonly called "dull pupils" excels the number of bright ones. In this case, the average pupil is the dull one. Do we go about it in the right way to develop the reading habit in dull pupils? Suppose you had been stript of your speech and hearing, how much better, than these so-called dull pupils do you think you would have done? Are they not then mis-called "dull?" Are they not *average* pupils, those who outstrip them being *surprisingly* bright? If this be so—and we believe it is—it becomes our duty, instead of reasoning that these children are dull and cannot be educated, to examine closely our methods of instructing them, and never give up until a way has been found to so educate every deaf child of sound mind and memory, that, upon leaving school, he will go forward and not backward with his education.

It may be that the ideas which we have learned for him, and given him by lecture, before he has been put in a way to get them for himself, has not been educating him, but has been the source of much time and labor almost thrown away. Perhaps that time ought to have been spent in putting him in a way to educate himself, by enabling him to understand English by using English. We make a mistake in thinking that we are educating him, when in reality we are only giving him information ready made by lectures—that is, if he has not yet become able to get this information for himself. Certainly, unless he be made capable of educating himself, his education will stop when he leaves school, and the few ideas that we have had time to give him, while under our care, will not suffice for him through life, and will many of them soon be forgotten. Ought we not then to devise, if possible, methods to make our pupils better idea-getters, and compel them to wait for ideas until they are able to get them for themselves; or, in other words, make them entirely independent in everything, except in the selection and preparation of mind food.

We venture to suggest a possible improvement upon the feature of our system, which bears directly upon fitting the child to understand written composition. After we have taught the little child the names of a certain number of objects, his own name, and the names of his teacher and classmates, we wish to teach some action words. A classmate carries a book. The teacher writes, "John carried a book." Our system contemplates that the teacher at once informs the pupil what the new word represents. Since the learner is already familiar with the words "John" and "a book," and has seen the action performed, ought not the teacher, instead of telling the child what the new word means, to ask him what he thinks it means, and tell him the meaning, only when he has exhausted every effort to find out for him-

self. It may possibly be too soon to practice this theory with pupils so young, yet it illustrates clearly the principle that may be applied to older pupils. Do we not tell our pupils too much, and not spend enough time and have enough patience in requiring them to find out for themselves.

It is quicker and easier for us to explain the difficulties which our pupils meet, yet, if we wish these duller pupils to ever be able to establish the meanings of words from the context, or to reason for themselves, we must first go through the process with them. A single day will not suffice to give them this habit, nor can it be given them by once telling them that it is the proper thing to do; it must be a part of the system of their instruction. If we habitually tell a child the meaning of new words, he is learning how to find out their meaning in one way—to wit, by being told. Suppose we reverse the order, and patiently require the pupil to exhaust his own resources before giving him aid; we would then be educating him by developing his reasoning powers, rather than by giving him information by the cramming process. Educated in this way the child would experience less difficulty in his first attempts at independent reading.

We are now dealing with the corner-stone of a deaf child's education—his knowledge of language. What is the best method of teaching language to the average pupil? It is highly important that we endeavor to have this question answered right, because if we pursue a wrong method, no matter how much time be spent on the subject, the pupil will still leave school with but little real knowledge of the subject.

Let us see how language is learned by what may be called the natural method. This is the method by which the little talking child learns the use of language. Natural methods are in many cases the true methods, and the manner in which a mother teaches language to the child may furnish us with a useful lesson. We will find that she does not take each word of the language, and act out the meaning for the child's benefit. She probably says, "Come to me." The little child knows as little of what these words mean as a little deaf child would, but the mother repeats expressions of this kind time and again, until the child suddenly comes to understand their meaning. After the child has learned a few words, the mother does not deem it necessary to explain the meaning of any new word which she may have occasion to use, but when she has used the new word often enough, she finds the child is familiar with its meaning.

In listening to the little story from mother's knee, the child hears words which it cannot understand, yet its mother has not instilled the principle that it is necessary to understand every word in order to understand the story; but so long as the child gets a general idea of the story it is content, and subsequent use of the new words will make their meaning clear. Perhaps the child, of itself, does not get the exact meaning of a word, yet its mother seems to instinctively know that it is better that the child have a somewhat imperfect understanding of it, than to bring him up to believe that he must run and ask some one to act out and explain the meaning of every new word for him.

What, then, is this natural method of learning language? It is

simply learning language by using it, rather than by attempting to commit to memory the meaning of each word of which it is composed.

Are we, in teaching the deaf, following this natural method closely enough? Could we not give a better command of language to the average deaf child by placing in his hands and leaving him to read the little "Mother's-knee Stories," which have done so much to familiarize his talking brothers and sisters with their mother tongue? The talking child learns language, by having stories, and things in which he is interested presented to his notice by means of spoken words; and the deaf child will learn language best in practically the same way—by having suitable stories and other written compositions, in which he will be interested, selected, and he educated to read them.

Since it will always be impossible to have a deaf child read as much language as a talking child of the same age will hear, the deaf child's knowledge of language will never equal that of the hearing child, other things being equal; but if we follow this principle with the deaf, it certainly seems that their ability to use language must improve with every day spent in school, let them be either bright or dull.

In times past, it might have been possible to make people believe that the deaf were taught by means of a secret art, and that they are a class of people different from the rest of mankind, but it is now quite generally known that deaf children have much the same likes and dislikes that talking children have; that they must be taught the same things; that the more common sense and reason we apply to the process, the more effectually will they be taught. In educating the hearing, we can use spoken language, while with the deaf a slower means must be used, but at similar stages of their advancement the process should be as nearly the same as is possible.

What has been suggested as a possible improvement in the method of teaching language may suffice to illustrate similar possible improvements in methods in other branches of our work. The establishment of kindergartens and encouragement to write suitable text-books are subjects which may well occupy our attention. Do we wish to rest satisfied with the conclusion that the plan of instructing the deaf which has been handed down to us from "time wherein the memory of man runneth not to the contrary," is all that could be desired, and that the deaf of to-day, and the deaf of to-morrow must be instructed in the same way that their grandfathers and great-grandfathers were?

In the days of Lucretius people generally rested satisfied that

"To instruct the deaf no art could reach,
No care improve, no wisdom teach."

But the deaf who have lived since that time have held in sacred memory the names of persons, who said that this was not and could not be true. Those who overturned this theory were interested in the deaf and had their welfare at heart. They said more could be done and more was done; grand and noble was the work which they accomplished.

Without doubt our forefathers did their full share in the uplifting of the deaf, and yet, we believe that the deaf of the future will enjoy the benefit of as great advancement and improvement in plans for their instruction over the deaf of the past and present, as the deaf of the present and past have over the deaf in the time of Lucretius.

We have no reason to believe that progress has stopped, but what-

ever is done for the deaf in this direction, will be done by the those who are interested, and these will come from the ranks of those engaged in the work.

Among those who are laboring for the desired improvement, are many deaf people, and it may truthfully be said that none there are who have the true interests of the deaf more sincerely at heart than do the deaf themselves.

It is just possible that our system of instruction is perfect as it now stands and will admit of no beneficial material changes, and yet we, as educators of the deaf, have no right to assume that this is true. Experienced educators have tried such changes as: the abolishment of the use of signs as a means of communication in instructing the deaf; the pure oral method; and other lesser changes; and reported favorably upon them. While none of these have met with anything approaching unanimous endorsement, we owe it to the class in whose interest we labor to give time and attention to the consideration of any such improvements. The question "Is there a better way?" must be constantly before our minds.

It was a desire for a better way that brought into existence the steam engine, electric car, the telegraph, and other useful inventions. People lived for ages, and lived very well too, and did great things without ever dreaming of the possibility of these facilities, yet there was a better way, and we of to-day are enjoying it on every hand.

Will the deaf of the future think of those of the present day with regret that so very little was done for them? Are we doing as much toward making possible for the deaf what has heretofore been impossible, as our forefathers did, or are we content to ride along in the ship which the efforts of our forefathers constructed?

One of the most fruitful sources for bringing about what has been suggested is our National Convention. This being true, any thing which bears, either directly or indirectly, upon the desired better way in any part of our work, should properly find a place for discussion at these meetings.

The advancement of theories which the majority of us have never tried, and in the efficacy of which we do not believe will not, among fair minded people, produce discord or ill-feeling; and even if this were otherwise, such discussion should not be prevented, even in the interest of harmony. The object of our great national meeting is not to enable us to exchange papers and notes of admiration, but to advance our methods and lift the entire teaching force among the deaf to a higher plane, and while we may differ and cross swords in matters pertaining to our profession, surely, so long as each is sincere and prompted by honest motives, freedom of expression can by no manner of means engender personal feeling.

We believe that the primary object of these conventions is to secure for the deaf the benefits of advancement in methods of instruction to which they are entitled, and while those who have in times past been eminent and faithful in uplifting the deaf should be remembered with reverence, no portion of the time at our conventions should be spent in extolling the virtues of noble men and women. The many papers published in the interest of the deaf afford abundant opportunity for remembering with gratitude, and recognizing the work which these

benefactors have done ; but should we allow any part of the limited time of these conventions to be occupied in this way, we are in a measure robbing these meetings of their usefulness.

The unselfish desire so plainly manifest on the part of those who are enlisted in the work of educating the deaf, assures us that reforms will not lag but move forward with a rapid pace.

THE RELATION OF THE SIGN-LANGUAGE TO THE EDUCATION OF THE DEAF.

By Isaac Lewis Peet, LL.D., of the New York Institution.

Ideas, etymologically speaking, are the entities seen with the mind's eye.

Concrete ideas are produced through the senses of feeling, taste, smell and hearing, but to a far greater extent through the sense of sight. Hence, they may be defined as images of objects transferred from the retina of the physical eye to the corresponding seat of sensation in the brain, where they are retained and made permanent as the same objects may be thrown by the camera upon a sensitive plate, and afterward fixed by chemical process. They may be either single or in groups, quiescent or in motion. They form pictures, the distinctness of which depends not only upon the intensity of a first impression, but also upon subsequent observation of details and familiarity with the general grouping of related objects. They are often so connected that the natural sequence of cause and effect is clearly perceptible.

The breath of the wind on the cheek followed by the ripple on the water ; the flight of an arrow followed by the falling of a bird ; the gathering of clouds followed by the downpour of rain ; a beautiful sunset followed by a glorious sunrise ; become so linked together in the mind that when we notice the one, we intuitively look for the other.

Thus mental vision becomes the foundation of all reasoning, and accordingly as it is cultivated, becomes the source of extensive knowledge. It is the foundation, too, of memory, which, in the sense of continuity, may be regarded as a moving panorama, beginning with the past and coming down towards the present, or with the present and going back towards the past, or, which is the same thing, as a series of pictures producing the same result. It has to do, moreover, with recollection, which is the direct result of that association of ideas, whereby one naturally suggests another, and presents for separate inspection, the individual pictures that are hung in the gallery of memory.

There is another power, however, allied to vision and growing out of it, which adds greatly to its efficacy as a potential factor in human thought—the power of re-arranging concrete ideas, so as to form new combinations, whereby we can *conceive* as well as *perceive*. As its name imports, it equally with vision, produces pictures in the mind, though it can, and often does, select parts of a single object or of different objects, and construct new wholes unlike anything of which

vision may have taken cognizance. Such is imagination as distinguished from memory.

Memory sees what *is* or *has been* ; imagination what *may be*. The one presents to the mind actualities ; the other possibilities. The one informs ; the other suggests. The one asserts ; the other interprets. The one reproduces ; the other creates. The one is imitative ; the other inventive. The one walks in beaten paths ; the other discovers new and possibly better routes. The one is content with existing conditions and surroundings ; the other presses onward toward an ideal.

The one reasons from accepted facts ; the other, from facts conceivable and to be sought after.

Either, in excess, affects the balance of the mind. Both, in combination, produce the happiest results. Alone, the memory lives in the present and in the past without securing hope or joy from the future. Alone, the imagination is but a combination of airy nothings—a delusive mirage, an elusive *ignis fatuus*.

The one may be relied on as having a solid basis of fact ; but, around it, the other may throw a drapery of grace and beauty, or, resting upon it, may peer keenly into the future, and see new conditions and new possibilities.

The mind, however, either through vision or imagination, cannot be content with contemplation. Man as a social being must tell what he thinks. He shows it in the light and play of the countenance and in the soulful glance of the eye, no less than in the shadows that darken the brow, or the dejection that casts down the features. His attitude, his movement, his very listlessness, all tell of that which is going on within him, but when he essays more than this involuntary, unconscious betrayal of thought and feeling, he resorts to some definite and intentional method of expression. Naturally, he endeavors to imitate the visions, either of the actual or the possible, that occupy his mind. Hence, he resorts to gestures, action and pantomime, which, as a rule, are adopted for this purpose by the untutored races, and are regarded as important accessories even among the most cultivated.

The picture in the mind, if in motion, is acted out and made to reappear vividly in all its salient points. If it be a still picture, however, it can be accurately delineated by outlines drawn on a plane surface, rounded or modified, as the case may require, by shading or by color ; and hence, in all ages, *Art* has been employed to express thought. The artist may be a simple observer of Nature, and reproduce scenes, with which he has become familiar, for the delectation of those who have no other means of beholding them, or he may be an interpreter of scenes and events, with only the existence of which he is acquainted, but which his imagination enables him to present in their probable appearance and real relations.

The artist can give us the picture of a house or bridge, as it stands amid its surroundings. The architect may plan an edifice or a bridge in all its details, and give us a picture, which, when the structure is completed, is found to be as exact, in its verisimilitude, as if the picture had been made after, instead of before the work had been accomplished. In the one case, the mental picture reproduced depends upon simple vision ; in the other, it depends upon the imagination.

There is another class of ideas less easily defined. They are popu-

larly supposed to be unrelated to vision, and to be independent of it, such as quality, quantity, color, time, instrument, character, power, death, life and attributes of every kind. From the circumstance that they are when thought about, separated from any one concrete entity, they are called *abstract ideas* and, therefore, do not, in themselves, form mental pictures, but they are so related to the concrete and have, so to speak, so little vitality without it, that they cannot be considered, unless the mind, with the rapidity inherent in it, brings up picture after picture, of which this so-called abstract idea forms a component part. Thus the abstract idea of *whiteness* brings before the mind innumerable white objects, and the idea of time sets in motion a panorama of hours and days and weeks and months and years. Such abstract ideas cannot be portrayed on canvas, though concrete objects can be so grouped that the idea of whiteness, for instance, can be made the motive or topic of a painting, and, by the aid of metaphor and personification, those powerful instruments in the hand of the imagination, almost any abstract idea can be so handled.

There is no reason, however, why gesture cannot be made to subserve this purpose, or why a community of persons accustomed to converse in this way alone, cannot entertain these ideas as perfectly as any other. A short significant gesture or combination of gestures can fix each of these several abstractions perfectly, and in a most satisfactory manner.

Enough has perhaps been said to show that *all* persons think and reason, remember and purpose, by means of mental pictures, and that they more or less express their mental action in a pictorial manner.

There is, however, among the physical senses, one with which vision has nothing to do, and which has nevertheless dictated to the bulk of mankind the method of expressing their ideas. But for the possession of hearing, all men would, from the infancy of the race to the present time, have made their ordinary communications by a system of gestures, which, improving through the ages that have since elapsed, would at the present period in the world's progress have attained a degree of completeness that we might well regard as incomparable in simplicity, exactness, significance and beauty. Writing would no doubt have been hieroglyphical—largely supplemented by the magnificent perfection Art would have attained under the compulsion of necessity. Without hearing, however, all the ideas suggested by sound, and all the soul-stirring and soul-elevating influence of music would have been wanting. No note of warning would have startled the mind out of confident security to the recognition of impending danger, and possibly there would have been a larger class of mere dreamers than are now found among those whose placidity is constantly interrupted by awakening sounds.

Whether the first man Adam was originally endowed not only with hearing but also with the ability to express himself in connected spoken words, is a question of exegesis—but as a result of our own experience and observation we must accept it as a fact, that speech is a direct result of hearing—that except in abnormal cases, children who hear well will come to speak distinctly, that those who hear imperfectly will speak imperfectly, and that those who do not hear at all will not speak at all.

Without entering into discussion of the genesis of language, or of the steps by which different languages have had their birth, growth and culmination, like the language of the Hebrews, for instance, or the splendid tongues of Greece and Rome, it is sufficient for our purpose, to know that every human being comes into the world non-speaking, as is implied by the term *infant*,—that though he be endowed with hearing, he has at first no knowledge of the significance of words or sentences spoken in his presence, that the fundamental knowledge of these is acquired during the first three or four years of childhood, and that this acquisition and its subsequent development is due to an environment in which spoken language, aided by interpreting circumstances, scenes, expression of countenance, actions and gestures, has a controlling influence. Hearing significant sounds made by the vocal organs of those in his presence, his imitative propensity leads him to endeavor to produce similar sounds by means of own vocal organs, and thus he arrives at the ability to speak, in similar connections, words and sentences that he has frequently heard uttered. From this point he goes on acquiring new ideas and new forms of vocal expression from every one he meets. He numbers his involuntary teachers by the score, by the hundred, even by the thousand. If his environment be one in which pure, intellectual and refined discourse prevails, the language which he uses will partake of the same characteristics. If, on the contrary, it be vulgar, ungrammatical and coarse, he will have his start in life greatly handicapped by his unfortunate surroundings. His accent, too, is so subject to the same influences, that we find appropriate to almost every member of a mixed community, the remark made to the Apostle Peter when he denied his Lord, "Thy speech bewrayeth thee."

From such an environment as this, the congenitally deaf are absolutely excluded. Their modes of expression correspond exactly to their modes of thought. The pictures in their minds are faithfully reproduced in outward semblance, and in the silence around them, there is nothing to divert them to any other course. Whenever a number of deaf-mutes are congregated together, this tendency is at once seen and acknowledged. Thought flashes from mind to mind with an exuberance that is stimulating, expansive, and, to them, in the highest degree enjoyable. In such circumstances they find themselves in their true social element. They breathe, so to speak, their native air. There is a direct connection between thought and expression, which evinces the fact that there is no intermediary. With the hearing, however, words are intermediaries. The widely accepted notion that we think in words has no basis in fact. They do indeed possess the ability to formulate their thoughts in words, but the idea, as has already been shown, is antecedent to the word. This is strikingly illustrated by the fact that, in extemporaneous discourse, the idea with which the speaker is possessed is seldom expressed without a series of repetitions, in each of which the phraseology is so changed that a nearer approach to exactness is obtained. It is like the zigzags and parallels in military engineering whereby a besieging army is enabled to draw nearer, by degrees, to the point of attack. In elaborate composition, too, how often is it necessary for an author to recast sentence after sentence before he is able to present an idea precisely as it exists in his mind. In fact, such a mastery of any language as shall make it a facile and

thoroughly available instrument of expressing ideas is one of the most difficult of human achievements. So fully impressed was the distinguished Dr. Horace Bushnell with the difficulties presented by the use of words as intermediaries of thought, that he used to say that *no* language was adequate to the full expression of all our ideas.

The question arises, what should be the environment of a deaf-mute during those years when his plastic mind is undergoing its development? Should it be restricted to one of spoken words, which he is taught to read upon the lips, and to utter with laborious effort? Should it be confined to one in which words spelled with the fingers, words the meaning of which, as in the case of those labial signs which are forced to become the representatives of sounds, dawn slowly upon the mind, or should it be one in which his relations to those with whom he associates are as free and spontaneous as are those which the hearing child enjoys in the society of his fellows?

Were it not that deaf-mutes form but a small proportion of the community, were it not necessary to bring them into intimate relations with those composing the great hearing world around them, who do not understand what, for want of a better term, is called "the language of signs," the answer would be obvious. As it is, he must, in some way, be made acquainted with the language of his country, to which he is to all intents and purposes a foreigner. Of this, the most useful form is necessarily that which appeals to the eye in the guise of writing, or of its alternate, print. Written words are to the hearing the symbols of sounds. To the comparatively illiterate, they have no significance except as they are slowly made to recall spoken words, and even among the highly cultivated, a spontaneous undertone of speech accompanies even the most rapid reading. To the congenitally deaf they are rather the silent symbols of signs. It is true that it is possible for them to be the direct symbols of ideas, but there is great reason to believe that, in reading, all deaf-mutes, by whatever system taught, make what may be called imagined gestures, to accompany every word or phrase they read.

How then shall we introduce the deaf-mute to a knowledge of written language? Shall it be all object-teaching, and shall every name he learns to read or write be attached to the object of which it is the symbol, and every phrase and sentence he acquires, be taught only as the occasion for it shall arise? Or shall we not rather regard him as a foreigner, as he is, and make the language, which he already knows, the interpreter of that which he is learning? Other things being equal, this would seem to be the true philosophy. Through signs he can be inspired, as it were, with an idea, and then the method of expressing it in language can be taught to him; and, *vice versa*, the meaning of a written sentence can be given him through signs, which shall extend not only to every word and modification thereof, but also to the true meaning of the whole. Such a course gives life, vividness and reality, to the cold form of words and makes him perceive their adaptation. But to enable him to use words for himself, requires constant practice. One of the best methods of giving him such practice in connection with the events of every-day life is to elicit from him, through signs, an account of what he has seen and done and thought during a certain specified period of time, and then require him to express the same in

writing. His mistakes should then be carefully corrected, ellipses supplied, and the whole be brought to the form of good idiomatic language. Every alteration should be carefully explained through signs, and the exercise should be rewritten and revised sufficiently often to enable him, without formally committing his work to memory, to make it a comparatively finished production. In this way the daily or semi-weekly journal may be made the means of constant improvement. When a lesson is assigned for private study, he should be required to seek out the meaning of each word, phrase or sentence, by patient thought, employing a lexicon so far as it may aid him, and he should then be questioned upon it by signs. If he has failed to elicit the real meaning, the teacher should have the whole lesson written out on the blackboard and explain it in signs, word by word, phrase by phrase, sentence by sentence—and then talk over the whole subject till he is sure it has made an indelible impression. This is as applicable to class work as to individual instruction, and thus becomes a great economizer of time. After this, the pupil or pupils must be required to write out what they have learned, in alphabetic language, to be corrected again and again. For this purpose, only short lessons can at first be given, but these will grow longer and longer as the knowledge and ability of the pupil increase.

Daily lessons should be given on the verb during the whole period of instruction. The use of this once mastered in all the moods and tenses, persons and numbers, and in the equivalent expressions to which they give rise, the language itself is brought into comparative subjection. In this, the language of signs is of great assistance; for the niceties of distinction can, by its means, be made completely evident. Written or dactylologic conversation between the teacher and his pupil is a very useful method of practice, but even here the sign language is a most convenient instrument to have at hand in case of misunderstanding.

Whenever it is found that the pupils of a sign teacher, to use a technical abbreviation, are not improving in written language, and especially in the language of every day life, it is certain that he lays too much stress upon the committing to memory of lessons and does not give sufficient attention to the practice, in every form, that is so essential.

To general reading, the sign-language has been found to be a wonderfully efficient adjunct. Let a teacher require his pupils to tell him in signs the gist of their reading, and he will find that, after a while, they will develop an ability to understand what they read which would otherwise be impossible, and he will also find that they will begin to use written language with a correctness and exactness that is surprising. They will, moreover, use signs themselves with much greater clearness and grace. As a preliminary to this, the writer has been accustomed to direct his pupils to make a methodic sign for each word as it appears in its order in the printed line, noting the words he does not know and applying to his teacher for explanation afterward. To facilitate this practice, he has required that whole pages be dictated with the manual alphabet, while the pupil gives the sign for each word at the moment it is spelled. This is on the principle that, to the deaf, the sign for a word is its significant pronunciation, just as the sound thereof is to the hearing.

- And it may be remarked in passing, that it would be well that all communications given by the teacher in the class-room should be made in this way, that the pupil may become accustomed to receive ideas in the order of words as hearing children do, without being deprived of the assistance of what, to him, is the only true equivalent of spoken language. It has been found, in practice, that there is no more effective method than this of preparing lessons for evening study.

There is no eloquence that deaf-mutes can appreciate except what comes to them in the form of signs. No appeals to the intellect or the emotions can touch them, in equal degree, by any other means. Lectures, addresses, sermons, conveyed in this their own vernacular, have a peculiar power and influence. Debates in signs in their literary societies, the arguments of which they are, by the regulations, required to reduce afterward to writing, are found to be as useful as debates on the same topics among hearing persons, for they cultivate the reasoning powers and bring out the best results of intellectual attrition.

Much controversy has been excited among teachers of the deaf as to the advisability of using signs purely ideographic, and another class of signs designated as methodic, whereby every individual word in a sentence shall be definitely distinguished, in every particular, from every other word of similar import. In popular parlance, ideographic signs deal with phrases and sentences as pictorial entities, but methodic or word signs may be used in the English order, so that the teacher may dictate any given sentence to a class of pupils, and expect each one of them to reproduce it in writing, in the identical words and order of the original, while, if he conveys the same ideas in ideographic signs, as many different written versions will be furnished as there are individual writers. Ideographic signs give good practice in originality of expression ; methodic signs, in correct forms of language.

Personally, I discard neither, but use them interchangeably, giving preference, however, to the ideographic as corresponding to the true genius of the sign language. There are certain ideas, however, for which it is essential, even when using ideographic signs, that there should be a fixed and invariable means of designation. All abstract and generic terms, such as institution, instrument, color, time, should be expressible by a short, distinctive sign, and, for many of them, it has been found convenient to introduce a letter of the manual alphabet in connection with it. These are often strikingly significant. For instance, *character* is a *C* stamped upon the heart ; *characteristic*, a *C* stamped upon the hand. *Maxim* is an *M* exhibited as pressed upon the elevated palm ; *morality*, the same letter pressed upon the heart, and *religion* is the *R* formed by twisting the middle finger over the first in such wise that it resembles a cord, raising it from the heart toward heaven and then bringing it back to the heart—a significant translation of the Latin term *religio*—the binding back.

Ideographic signs, in which are, from necessity, included the signs for generic and abstract terms, should invariably be used in translating a spoken discourse *pari passu* for the benefit of deaf-mutes present. It is not the words but the ideas that the deaf listener requires. It is a crucial test, however, for if the speaker gives mere words, words, words, he will by them be weighed in the balance and found wanting.

While it may legitimately be inferred from the tenor of this argu-

ment, that the language of signs is a most valuable instrument in the mental development of all deaf-mutes, and I might add, of even those hearing persons who may have acquired a mastery over it, the important fact must not be overlooked, that its chief use is to facilitate the acquisition of a spoken language like the English, as it exists in alphabetic form, and to make it possible for a deaf-mute to acquire so thorough a knowledge thereof that he shall be able to secure unrestricted access for himself to the stores of literature and the records of science, and at the same time have the ability to express in the language in which these are embodied, his own opinions and feelings on the same, or other topics.

The question is a secondary one whether he shall be taught to recognize and make use of the spoken form of the language with the alphabetical form of which he has been made familiar.

Articulate speech has been so analyzed that its elements are very generally understood among teachers of the deaf. The positions of the organs employed in producing it have been so clearly defined that the elements of a spoken word are recognizable by the eye, and capable of being imitated by movements of the organs of speech.

Speech has been made visible and silence has been made vocal.

For this result, a debt of gratitude has been incurred to Professor A. Melville Bell, the distinguished leader in the investigation of vocal physiology, whose works must be regarded as the latest and best authority upon every variety of vocal utterance. By his "Visible Speech" an alphabetic form may be conferred upon every spoken language that has not already been reduced to writing, and the pronunciation of every written language can be presented to the eye. A similar debt is due to Dr. A. Graham Bell, who, better known to fame through inventions of vast moment, is yet known and honored for having devised and introduced an application of his father's system to the case of the deaf-mute.

By following out its principles, it is quite possible to teach every deaf-mute to discern, at first slowly, but afterward more rapidly, the elements of every word as spoken by his teacher, and then to place his own vocal organs in the position that he has recognized as necessary to the production of what he has been told is sound.

In this way every intelligent deaf-mute, may if his vocal organs be perfect, be taught to give in speech with at least approximate distinctness, such language as he knows, and to read the lips of at least one person. The success of this lip-reading as it has been called, depends upon very exact positions on the part of the teacher, but as one after learning to read exact and carefully executed handwriting without difficulty, may become gradually accustomed to read what is less and less legible, so the deaf-mute may gradually turn from the one person whose labiology he can read perfectly, to others less careful of utterance and by observing similarities and differences, learn to catch what is spoken. The great labor involved consists in learning to follow the first speaker. In this, the use of the manual alphabet simultaneously with recognizing the elements of speech, and the use of signs for interpreting words and sentences, are found to be of great assistance. So that, even in a department of instruction that has been regarded as

essentially antagonistic to the language of signs, the latter has been found to have a place.

One hour a day devoted to this instruction, not to selected pupils, but to all who enjoy the benefits of an Institution, will in the end produce gratifying results, and will not be found wasted even in the case of those who find it most difficult, for it adds the knowledge of another of the allotropic forms which language may assume, and thus makes the deaf-mute more familiar with it, as we become familiar with anything that we see, not in some only, but in all of its phases.

This is the view which has come to be entertained in the Institution with which the writer has had an experience of forty-five years, as a practical instructor, concerning the relations of signs, articulation and dactylology as combined in one system.

THE IMPORTANCE OF SIGNS.

By W. G. Jones, of the New York Institution.

The Sign Language, which is looked upon by many as something greatly detrimental to the educational progress of the deaf-mute, is, on the contrary, the most important means of imparting knowledge to a pupil in the classroom. For years it has been relied upon by all who have found, by experience, that deaf-mutes cannot learn much without the aid of signs.

Signs are of vital importance to the deaf, and are to them what Webster's Dictionary is to all, for they convey to the mind of a deaf-mute, be he dull or bright, a clear idea of the true meaning of a word new to him and also the substance of a subject. After a pupil has been in school for a short time, he may be able to learn a lesson perfectly, word for word, like a parrot, but when he is told to render it into signs, he is all at sea and has no idea of the meaning of what he has learned. The signs test his understanding. The teacher should always have his pupils recite in signs the lesson learned the night before, to find out how much of it they understand. So signs will give life to the thoughts of the pupils when they recite.

A bright pupil will make clear signs, because he will easily grasp the meaning of his lesson, while, on the other hand, a dull one will sign in a confused or awkward manner, as he feels himself on unsafe ground when required to give in signs the meaning of a word or sentence.

It would be wrong for a teacher to think he was wasting valuable time on such a pupil as the last mentioned one, or to so neglect him, and at the same time to push the bright ones on, that at the end of the year, the unfortunate will either be left in the same class or placed still lower.

Of course these dull pupils are the greatest trials of a teacher's life, but they are always with him and he must accept the inevitable. His duty is clear. He must be patient, and doubtless will have to spend a much greater time with them, but will often succeed in getting very good results.

But how can the mind of a dull pupil be reached? The only true answer is that signs are the medium.

As a rule, the dull ones are found oftener in classes of beginners than higher up. So the teacher of the primary class should be, not only a good sign-maker, but able to answer the many puzzling questions which children are always asking.

On the other hand, if that teacher be a poor one, it will make the work of the other teachers much harder, and they will say his pupils are a drawback to their classes when they join. But if the pupils have been well taught, they will be able to give satisfactory proof by signing clearly and writing short sentences fluently.

Most of us find much pleasure and profit in attending lectures or debates, for they act as a tonic on our mental powers, and are sure to keep us in good condition. It is the same with the deaf-mute pupil. Teachers feel it a duty to encourage his search for knowledge, by telling stories in signs, or giving lectures in signs on subjects with which the pupils should be familiar, and it would help him very much to have him write what he had learned through signs. This would enable him to grasp the idea more readily, and at the same time he would be getting control of the language.

Signs are a cyclorama to the deaf. If signs were not known to us, how many of us would be what we are to-day? We should be in a pitifully lonely condition. But by the aid of the sign-language, we are brought close to each other, and are enabled to impart to our pupils much that would be impossible without their use. There are many deaf-mutes that have been taught in schools where signs were prohibited, who will tell you that since they have come in contact with those using signs, they have learned much more than when they depended alone on lip-reading or the manual alphabet.

We know that new pupils, if they have not learned to speak before becoming deaf, always make natural signs when they come to school. Let us ask ourselves, is it right for us to spread our arms upwards and turn aside our heads, telling them never to use signs again? Such signs are part of their birthright and, while permitting them to use these rude yet often very droll signs, we can polish their sign language till it is like ours, at the same time, making them see why the signs we teach them are better than their own.

The truth must be told, although very humiliating, that many deaf-mutes, when they have graduated, are scarcely able to describe what they read in newspapers, or even what their hearing friends write to them. Why should it be so? Because they were not well-drilled in the sign-language.

Good sign-makers are generally ready-writers and can interest an audience better than poor ones. So we have a strong proof of the importance of signs.

Teachers who sign well and can express themselves clearly in writing are always successful in the classroom, because signs are to the deaf the real guide posts on the road to knowledge, and frequent writing is to them what stepping stones are to those who cross a brook.

Without the aid of signs, many of us would be like a turtle lying on its back, making futile attempts to turn over, which, if it finally succeeds in doing, will walk slower than ever, because it has become tired by righting itself.

Signs are so vastly important that they may be compared to stereop-

ticon light cast on the screen-like minds of the deaf. It is well known that many deaf-mutes construct their sentences in a peculiar fashion. They write according to the order of the signs they would use in expressing their ideas. This fault is a very common one, and is therefore held up as an evil, resulting from signs, by those who disapprove of signs. But it must be understood that this is not a fault peculiar to the deaf. Children, when learning to talk, invert the order of language, as also do foreigners when attempting to express themselves in English. The fault should be corrected by the teacher. He should insist on his pupils writing as much and as often as possible. That is a sure way to make them have confidence when they write to their hearing friends.

A teacher cannot be called a good one until he can master, not only the sign language, but written language as well. Then he will be able to teach his pupils, so that they will be masters of themselves when they leave school. Consequently, it is seen that signs are, in a wide sense, the foundation of a deaf-mute education. It is well known that the Combined System schools approve the use of signs for the reason, that the pupils can learn with their help much more in a shorter time than they could without their aid. For, by the very nature of a deaf-mute's affliction, he requires a much longer training than his more fortunate brothers, and so teaching by signs and writing trains the mind faster than any other method.

Lip-reading and articulation are very good, too, but they are only accomplishments. A lady cannot be said to be accomplished until she is able to sing, play on the piano, etc. A deaf-mute may not be accomplished until he can read the lips and articulate, yet, for all that, he may be a well-educated person without a knowledge of these, if he can express himself in well-written language.

Dr. Peet has made it one of his rules that every pupil in his school be daily taught one hour in lip-reading and articulation, and I am happy to say that many of the pupils can carry on a conversation with their articulation teachers; but he also insists upon their spelling with their hands and making the signs for the spoken words, so that they shall grasp the meaning of the spoken sentence. He is a firm supporter of the sign-language. I believe that most of us who are here in the chapel to-day, believe the Combined System to be the best of all. It does the greatest good to the greatest number, and is productive of the best results, when the average length of time that the deaf-mute has to spend at school is taken into account.

Signs may be said to be the electric shock given to the seemingly dull mind of the uneducated deaf-mute. When first used upon him, his intellectual powers show signs of life, just as machinery begins to move when steam is driven into it.

Those interested in deaf-mute instruction will feel happy to see how eager the pupils are to learn anything new in the chapel or classroom where signs are to be used to explain the subject.

Before the combined system had been used, those advocating the oral method could truthfully say that lip-reading and articulation were not thoroughly tested in schools other than their own, but now that they have been introduced and used in connection with signs, the teachers of the combined system can safely say that deaf-mutes do not

learn as much by the oral method as by the combined, given the same length of time; for the combined system does more and better work than the oral system alone. In the latter, the pupil is handicapped. The teachers of the combined system are really practical, for they are always ready to adopt the best means for instructing the deaf-mutes, while the oral teachers act as if they felt sure that nothing could be better than their own particular system. In a large hall like this chapel, pupils of the combined system can enjoy lectures, etc., given in signs, better than could pupils of the oral system, because every one of the former can understand the whole, or nearly all, of the address, while very few of the latter could repeat any part of it.

Now let us turn our attention to the class-room work. By means of signs, new pupils gain the first elements of knowledge. As they progress, fewer signs may be used, and the pupils should be required to write what they had learned through signs. The teacher must also devote much of the time in drilling them into the use of the manual alphabet, for the spelling hands of the teacher are like voices to the ears of the deaf-mute. The task of writing also strengthens the memory. But while learning language, he will often get confused in trying to take in the meaning of a word, or subject, of a lesson; then come the useful signs to help him over his difficulty.

Learning to sign well and properly is a science, and requires much study to master it. In taking up the work of teaching, one must learn to be patient and persevering. He must make the school work of his pupils interesting. He must never discourage them when they make mistakes.

Signs made by a teacher exert a strong influence on the moral character of a deaf-mute pupil so that, to a great extent, the child receives all the moral and religious training from him. Nothing can show so clearly to a deaf child the different shades and meanings of language as signs. Words are cold, but once put an abstract idea into the language of signs, and immediately it takes on color and life, and the deaf-mute will at once grasp what he would fail to perceive if only words were used. So we find that, in order to reach the mind of the deaf-mute, we must use his natural language—that of signs—which is to him what speech is to the hearing, and as long as deaf-mutes exist, so long will signs be one of the most important factors in his education.

DR. E. M. GALLAUDET: I desire to invite the members of the Special Committee, appointed this afternoon to consider a possible change of meetings of the Convention, to come together this evening at half past seven, in the office at the northwest corner of the main building.

A. L. E. CROUTER: As chairman of the Committee on Necrology, I desire that the members of the Convention will report to me the names of those who have passed away since the adjournment of the California Convention.

DR. G. O. FAY: The order of papers for the evening session will be :
1. "The Colloquial Use of the English Language among the Deaf," by Z. F. Westervelt, of the Western New York Institution.

2. "How shall History be Taught?" by W. A. Caldwell, of the Pennsylvania Institution.

3. "Schoolroom Difficulties, and How to Cope With Them," by Emma F. West, of the Pennsylvania Institution.

4. "Physical Training of Pupils," by J. H. Eddy, of the Central New York Institution.

T. F. Fox: The graduates of the New York Institution are requested to come together this evening in the boys' sitting-room.

The Convention then adjourned until half past seven o'clock

EVENING SESSION.

MONDAY, August 25.

The evening session was assigned to the Normal Department.

Dr. E. A. Fay, of Washington, who occupied the chair during the evening, called the gathering to order at 7:30 o'clock.

THE CHAIRMAN: The first paper for your consideration this evening, will be presented by Mr. Z. F. Westervelt, of the Western New York Institution.

THE COLLOQUIAL USE OF ENGLISH BY THE DEAF.

By Z. F. Westervelt, of the Western New York Institution.

All teachers of the deaf agree that it is desirable that English should be the language of the deaf, as it is of our hearing children. But many are sceptical as to the possibility of the deaf acquiring colloquial use of English—a language designed for the hearing. Scepticism on this point would be readily overcome if other teachers could see what I have seen; seeing is believing. I have seen the deaf at the school at Rochester, acquire the habit of expressing their thought through English, and grow so accustomed to the language that their conversation was fluent, natural, and readily intelligible. In Dr. G. O. Fay's report of his visit to the school at Rochester, he not only corroborates this, he states that all the deaf in the school use English, that he did not see a sign while he was there. English in its alphabetic form is designed to address the sense of sight, and the deaf seem to learn to spell English words with less difficulty than many do who can hear.

The deaf who learn to use English as their sole language, find it in every way satisfactory. A demonstration of this proposition does not require that every deaf-mute in the country, or in a school, should be party to it; when it has once been proved by even a limited number of instances, its truth is established; that it has been demonstrated by a whole school establishes it as a fact beyond question. Should a child who has been taught to use gesture, and is not accustomed to use any other language, be admitted to that school, his presence, or the

presence of several such, would not affect the truth that has been demonstrated.

The language that is maintained as the colloquial language of a people, is the one through which the children prefer to receive their education. In a section of Wisconsin, where the population is principally German, the school-board has established German as the language through which the children shall be taught in the public schools. Some zealous Americans have opposed the Germanizing of our great American institution, and much bitterness of feeling has been caused, but there is a strong determination on the part of the German element to have the public schools provide education in the language which is the mother-tongue of the larger portion of the children, whether it is the language of the American people or not. Whatever objection can be raised to this position on the part of our German citizens, is equally valid as an objection against the teaching of the deaf through a language of De l'Epee gesture signs which all know is as foreign to English as is the German language.

Teachers of the deaf who are accustomed to use, and to see the deaf use, the language of gesture signs, find it hard to believe that the deaf could learn another language equally well, or that they could themselves express their thought to the deaf with equal ease and clearness in English words. I have been told by many of the deaf accustomed to the use of English, that they prefer English to signs. Habit is everything; what we are accustomed to is easy and natural; what we are not accustomed to often seems impossible. A Chinese missionary told me that when he returned to this country and addressed American audiences, he could not awaken the enthusiasm in his listeners; he could not himself feel the warmth in his English utterances, to which he was accustomed when preaching to the heathen in their heathen tongue.

The object of teachers of the deaf, and of the public in the maintenance of our schools, is to give to deaf-mutes a practical English education. It has been the custom of the majority of our schools to endeavor to accomplish this end, through the language of De l'Epee gesture signs which is thus made the mother-tongue of their deaf pupils, and through it they have given education, and moral and religious training, none the less real because in a language foreign to English. A comparison of the exercises of children in a sign school, or in a school in a foreign land, might show better exercises in English than those exhibited in some American schools, without proving that the children, who had acquired their English through translation, had a more practical English education than had been gained by the American children in the American schools. A college student taught Latin through translation may be able to prepare a perfect Latin exercise, as correct in construction and as elegant in diction as Cæsar could have written, but the Roman street gamin of Cæsar's time, would be immeasurably his superior in command of the language when it came to depending upon it for practical use. It is the colloquial use of English by the deaf that our schools should aim to secure, and this can only be acquired by using the language colloquially. There are no pupils in the school for the deaf at Rochester who have not been affected by association with other deaf-mutes

unaccustomed to English intercourse, or by the opposition to our methods which they have known to exist among the thousands of deaf-mutes and teachers of the deaf throughout the country. I do not refer to this to enter a complaint, but to suggest that whenever the colloquial use of English by the deaf is under discussion, it would be well to bear this fact in mind.

English in its alphabetic form is used by the deaf practically with about the same rapidity, that in its spoken form it is used by the hearing. Our pupils in a conversation usually utter words at the rate of eighty to a hundred a minute. This is rapid enough for all purposes of ordinary intercourse. The eye has almost no limit to the rapidity of its action. In books, as the eye passes from letter to letter, it is possible to read printed words at the rate of three hundred a minute. If the muscles of the hand were able to utter words at this rate, there is no question but that the accustomed eye would be able to read them. At a contest given among our boys for their own amusement, the most rapid and accurate spellers competing, all the others standing around, were able to read whatever could be spelled, with no hesitancy in detecting errors when any occurred. I was told, that the fastest rate, attained without fault in this dactyl utterance, was one hundred and fifty words a minute; the contestants reading an editorial from a daily paper which none of them had seen before. We saw this afternoon, when Dr. Peet read his paper, *The Relation of the Sign-Language to the Education of the Deaf and Dumb*, that his interpreter,—furnished with a corresponding manuscript—was able to deliver the thought, through the language of De l'Epee gesture signs, in a forcible and expressive manner, and at so rapid a rate that he finished before the doctor, who spoke with an easy delivery, about eighty words a minute. This is a pleasant rate for the dactyl utterance of words, a rate at which they can be easily read by an audience habituated to this manner of intercourse.

Finger-spelling is rapid, convenient, and definitely intelligible, and satisfactory for platform address, or to both parties in conversation. I have been asked if the close watching of the fingers, which dactyl intercourse requires, does not strain the sight. It has been practiced for fourteen years in Rochester with growing satisfaction, and larger use, from year to year, and has injured the sight of none.

I have been asked how we get the pupils at Rochester to give up signs. The public sentiment of the school is against them. This is sufficient to influence any sign-maker, who wishes to be benefitted by the instruction of the school, to make earnest effort to acquire command of English. Pains have been taken to see that all the pupils of the school should know the reasons, on account of which it is considered advantageous to them to limit their intercourse to English. Little deaf children, who come with what is really no language at all, when received at school, are surrounded only by those who use English. No other influence is necessary to induce them to acquire this language than that of environment. The time it takes children to acquire a vocabulary varies greatly; those who have learned from home friends to give signs to concepts, to give names to things, learn most quickly to give the English signs for the things they have been accustomed to name. Some children in a short time have

acquired a sufficient number of words to enable them to have a good deal to say; others are slower. One boy, now an interesting character, was two years at school before he learned to use words. He got his first real start while at home with his sister, a bright girl, a little older than he, also one of our pupils.

THE CHAIRMAN: The paper is now before the convention for discussion.

MR. DOBYNS, of Mississippi: How did that little deaf girl teach her brother?

MR. WESTERVELT: She interested him in things or places about their home, and at the same time directed him to move his fingers as she did; but for a long time the boy failed to discover any relation between the thing and the oft-repeated action; finally, however, the idea seemed to come to him, that this persistent wiggling of the fingers meant something, and that it meant the name of the thing or place: he then made effort to learn their names.

MR. DOBYNS: Did she use signs in teaching him?

MR. WESTERVELT: Neither the sister nor the brother knows or can use gesture signs as a language, though they may have pointed and beckoned with their hands, and shaken and nodded their heads. I have not the least objection in the world to any such natural motions as these, used in connection with and not taking the place of words, in ordinary intercourse, but I do not think that a language of gesture signs is necessary as the medium for instruction of or intercourse with deaf children, little or big.

MR. DOBYNS: I understand you to say you used no signs in your school?

MR. WESTERVELT: I have never intended to say that we did not use signs, for every word that is uttered, every gesture of the hand, or action of the body, is, or may be a sign. We may use gestures to a limited extent. There are children in our school, who have learned the language of De l'Epee gesture signs from parents or brothers who have attended "sign schools," and some have themselves attended "sign schools," but our teachers do not know these signs and cannot use them. They use anything they may choose in teaching a new word to little children—objects, or words already familiar, or pictures, or pantomime—anything.

MR. DOBYNS: If you wanted to explain a word, would you use any signs?

MR. WESTERVELT: I should use any means that I found to be necessary to aid the child in grasping the meaning of the word.

MR. DOBYNS: Then, you do not teach altogether by the language alphabet?

MR. WESTERVELT: We do.

MR. DOBYNS: In speaking of the kindergarten, you used this expression, "There is no other influence necessary to induce them to use spelling." Will you please explain to the mute there, (supposing a mute to be present) on the board, the word "influence"?

MR. WESTERVELT : I never yet, in the kindergarten, had to use the word "influence."

MR. DOBYNS : I did not say you used such words in your kindergarten. I said in speaking of your kindergarten you used that expression. Will you just give us a demonstration on the board—just suppose you had a mute there—will you please explain to him the signification of the word?

MR. WESTERVELT : I have a little hearing boy, who doesn't know what the word influence means. I should use the same words and illustrations to make the meaning of the word clear to my deaf children, that I should to my little hearing boy, and I should hardly find it necessary to use gestures in making the meaning of the words intelligible to either.

If the convention will allow me, I should like to tell about this little boy. When he was nearly five years old, the question was raised in my family as to where he should begin his education. I preferred to send him to our own kindergarten, for I considered it as good a place for the development of the little child's mind as could be found, but my wife could not agree with me at the time. To her it seemed as if the task of spelling out all the letters of every word, whatever he should say, would burden the mind of the little fellow past what his body could endure, to say nothing of his having to learn to recognize words as they were spelled to him, and, if it did not injure his health and arrest his growth, it seemed to her that it would certainly retard his mental development. My wife's doubt and fear were to me a more severe stricture on the methods of our school, than all that had been said against them by those who had written without having seen our work; if my little, healthy, normally constituted, child's attendance upon our kindergarten was to be an injury to him physically, and if spelling were unfavorable to his mental growth, it would certainly strain the body and the mind of the deaf to a greater degree. But the mother's fears prevailed over the pedagogue's convictions, and the child was sent to a kindergarten in the city. In the latter part of the winter, however, the weather became so severe that we had to keep our little boy at home. He had become accustomed to the occupation of the kindergarten, and to association with little children of his own age, so that the quiet of home was irksome, and he became restless, and asked if he could go to school with our little pupils. He was allowed to go, but the teacher was directed to pay little attention to him, simply to let him have kindergarten games and occupations, as he was only to stay a few days, and would go back to his city kindergarten as soon as the weather moderated; but after a couple of weeks, when, the weather having slightly moderated, it was decided that he could go back to the city school, he did not want to go, so he was allowed to stay a little longer. Some days later, while his mother was in the kindergarten, she observed that he was intently and interestedly watching the teacher, (utterly unconscious that his mother would be surprised to see him doing what all the other little children could do) and, without any apparent effort, reading what the teacher spelled upon her fingers, obeying the spelled instructions just as naturally as though what the teacher said had been spoken aloud. He had only been there

a little more than a fortnight, but as his preference for his home kindergarten was backed up by marked improvement, the mother's objections were so far overruled, that she decided to allow the child for a time to continue with his little deaf associates, and he has continued until now. Within the first four weeks he acquired, what seemed to be, perfect freedom of intercourse through finger-spelling. How it was done no one knew; he was not taught, he did not have to learn, he came to a realizing sense of the meaning of words thus quickly, though gradually, without there being a certain point of time, after which he could, and before which he could not, understand. He received no directions or instructions other than that he must not attempt to spell words by their sound. Deaf children seem to come into a use and understanding of the spelled language of the school in much the same way, without conscious effort, without instruction from teachers upon more than a small part of the words that form their vocabulary, they become accustomed to them and use them.

My little boy had been attending our kindergarten about four months when, very greatly to his surprise, he found that he could read. He was one day sitting, holding his book, waiting for his mother to read to him. As he sat waiting, he picked out the letters of the words on the printed page, making them with his hand, and as soon as his hand had formed a word he recognized it and spoke it aloud. The word to him evidently did not consist of individual letters, but of a peculiar series of muscular movements, which, when completed, formed the sign of the concept. In this way he read, without stopping or caring for help, more than a page of the book he was holding. I was a witness of the discovery to himself of his ability to read.

MR. DOBYNS : How old was he ?

MR. WESTERVELT : He was five. As I watched his hand, I saw that he invariably finished spelling the word before he attempted to pronounce it. Then I held his hand, preventing his forming the letters, and he could no longer pronounce a word on the page, not even the words he had just read aloud; when my grasp on his hand was slightly relaxed, so that he could move his fingers to feel the letters, he was able to recognize the words and speak them.

MR. DOBYNS : Did the teachers treat him as though he was a deaf child ?

MR. WESTERVELT : Just the same.

MR. DOBYNS : There was no talking to him ?

MR. WESTERVELT : No, practically, there was none; he may have been spoken to when he did something which required the teacher's special attention. It is the purpose of our school that the teachers should speak and spell words simultaneously, but this is rather a difficult thing to do and the teachers who have been in the school a short time are not able to do it. He may have been spoken to in some of the classes, but probably, in most of his recitations, he had to depend entirely upon his eyes rather than upon his ears.

MR. DOBYNS : But your explanation of the word *influence* does not explain.

MR. W. G. JENKINS, of Hartford : I understand you to say that in

teaching your pupils you would use anything that would give them the idea ; you would use pantomime, you would use pictures, that you were not afraid of signs—I mean in explaining words.

MR. WESTERVELT : We do not use gesture signs in explaining words, or for any other purpose.

MR. JENKINS : You do not use signs at all, not even with little folks in explaining words ?

MR. WESTERVELT : No ; we do not use them at all.

MR. JENKINS : I have some difficulty in understanding your exact position. You have already admitted that you would use pictures, or pantomime, and that you would use signs, if it were necessary.

MR. WESTERVELT : We should use anything that we found to be necessary, but we do not find the words of the De l'Epee language, technically known among us as "signs," to be necessary.

MR. JENKINS : Would you, under any circumstances, use a "sign" ?

MR. WESTERVELT : I cannot say what I might do in circumstances in which I had not been placed, but for years there have been no circumstances that have required the use of the language of De l'Epee gesture signs and they have not been used in our school. I do not intend to mislead any one. I have not opposed, nor is our school opposed to, the occasional necessary use of motions of the hands, as in pointing, or of motions of face or body, as aids to expression. What I am opposed to, is the use of a language of gestures as a medium of intercourse. The English language can be used by the deaf with ease and certainty, and it not only meets all the requirements that can be met by a language of gestures, but it is more exact, stronger, and better in every way, and should be used in every school.

MR. JENKINS : That is just it. Everybody here wants English.

MR. WESTERVELT : We do not use anything else.

MR. JENKINS : It appears also, from what has been said, that when pupils come to your school, bringing with them certain signs used at their homes, you find out from their parents what these signs mean. You must certainly use these signs in communicating the ideas which they represent to the pupils.

MR. WESTERVELT : There would be no objection to that, but usually there is no special advantage in it, for when the boy has names for certain objects, he has distinguished those objects from their surroundings, he has a clear concept of them and will readily learn their English names, and he will learn these names more readily, because he has already a name for the object in another language. If the teacher knows the name in the language the pupil has been taught, there is no objection to her using it at the time she is teaching him the name in English, but our teachers do not know the De l'Epee names for common objects, and it is not necessary that they should. But while a child will learn names faster whose mind has been developed through another language, he will probably be more or less retarded in his after use of the new language, if it presents any great differences of construction. Our teachers use the words of no language but English to the pupils, and expect them to use the English only to one another.

MR. JENKINS : I have been spending a few weeks at a summer school at Amherst. It was the rule and practice of the teachers to use the modern languages in their respective classes. In one of these classes, during a simple conversation, the student could not understand the teacher. He might have gone on repeating his question to all eternity, but instead of wasting time, he finally put the question in the pupil's vernacular. Now, that is just what we do, who believe in a limited use of signs. We do not antagonize the method used at Rochester. We shall rejoice in every step of your progress. There is no vital difference between us; we all emphasize the necessity of using the English language, and the incidental use, by many of us, of signs as an auxiliary in our work of instruction, ought not to be a wall of separation between us. For us who are teachers of the deaf, the broadest platform is one of generous hospitality towards different methods, all uniting in the effort to bring the children who come to us, as speedily as possible, to a knowledge of English speech.

THE CHAIRMAN : The next paper will be read by Mr. W. A. Caldwell, of the Pennsylvania Institution.

HOW SHOULD HISTORY BE TAUGHT?

By William A. Caldwell, of the Pennsylvania Institution.

The study of History is of two-fold importance in a school for the deaf. Aside from its intrinsic value, it affords, perhaps, the best facilities for teaching the use of language of any study in the course. It is also freer from technical terminology, useless in the life of the pupil outside of school. In other words, the language employed in this study is, or ought to be, the kind that the pupil is expected to use when he leaves school, and as a consequence, the history lesson is at the same time a very practical language-lesson, more so than one in arithmetic, or grammar, or even geography can possibly be made to be. I presume that the earlier lessons in History are prepared by the teacher, especially for his class in all cases. This method is open to many objections, but the arguments in its favor are more weighty than those against it. Classes are not all of the same mental capacity, and the work done by one class would be utterly out of the question for another. Hence, it becomes necessary in the same grade to vary the work required of the pupils. The manuscript lesson of this year is too abstruse or too simple for the new class of next year. The amount of ground that they can cover, and the style of composition that is suited to them, must be calculated, and the lessons prepared in conformity with the conclusions arrived at.

My own work has been, for most of my life as a teacher, in the advanced classes, so it is with some diffidence that I offer suggestions with reference to the work of a different grade, and what I have to say respecting that work must necessarily be more or less theoretical, or at least, derived from the experience of others. We may be certain, I think, that the first steps, looking to the future course in History, should be biographical sketches of men famed in the annals of

the world. These should, of course, be very simple, indeed, in the beginning, the chief object being to arouse interest and excite a desire to know more of the lives of these men and the circumstances surrounding them. A young lady, who graduated from the Philadelphia Institution this year, told me that her first lessons in History were of absorbing interest to her ; so much so that she looked forward from day to day to that lesson with eagerness. She mentioned this fact voluntarily, as something that was deeply impressed on her mind. Of course, the disposition of a pupil often has much to do with the success of a lesson or a study, and we have to be governed in our selection of subjects, somewhat by the personal equation. The Indian is a valuable factor in this respect : he is generally a favorite with all classes, and by proper manipulation, he may be made more useful in the schoolroom than he has probably ever been anywhere else. Most pupils show in their faces what pleases them most, but where this is not the case, the teacher should learn, by questioning them or by noting in what direction their fancy turns when writing original matter, so that he may, in his preparation of these earlier lessons, make them conform as nearly as possible to the tastes of the pupils. As soon as it can be done, these lessons should include matter that will exercise the reasoning faculties of the pupil. Lessons of this character may be first given in the third year, and should certainly not be delayed beyond the fourth year. Succeeding these, there should follow a more connected form of American History.

One feature of our work, perplexing at all times, is especially so in laying out a course of study in history. Are we to recognize the fact that many of our pupils will leave school before the time has elapsed to which they are entitled, or are we to ignore that and proceed on the hypothesis that all will remain the full time? I don't know how many pupils I have carried through the Revolutionary War and left them (or they have left me, rather) ignorant of the war of 1812, the Mexican War, and all succeeding events. The better plan, as it seems to me, would be to touch very lightly indeed on the periods of Discovery and Colonization, expand slightly on the Revolution, make passing mention of the War of 1812, and the war with Mexico, (the latter is nothing for us to be proud of, any way,) and devote much of our time and space to the Civil War, and the period since then. Unless some such system is adopted, we weary or mystify our pupils with useless mental lumber about those Spanish tramps, De Soto, Cortez, and the rest, and by the time, they have reached a period when they should begin to feel that they have a personal interest in the narrative, they are disposed to regard the whole thing as a fairy tale or at any rate as something which does not concern them.

One of the greatest difficulties in the way of the young student is the matter of dates. Of course, some will be found who can readily memorize the figures, but the majority find even this hard work, and no doubt, most of the class have very vague ideas of what those figures really mean. Many chronological charts and tables have been devised to render this part of the work attractive, or at least to so present it that the elusive figures would be fixed in the memory of the student. These charts are cram-full of information—they are too full, in fact, and their very fullness makes them unintelligible and use-

less to a large extent. Instead of attempting to use them, require the pupils to construct their own charts. In doing this, it is a mistake to begin at the Creation of the World. Let the pupils make the first entries (and many entries) from incidents in their own lives, or incidents in the world's history that have taken place in their day. As they work backward from these data, they get a much more correct idea of the lapse of time than they would in any other way. When they compare their little span of life with the long line of dates proceeding, they get some adequate conception of when, for instance, America was discovered or Independence declared. Even in a class which has not begun the study of History on this principle, if the teacher will require some member of the class to write on the large slates all the years in order from 1890 back to 1492, filling in occasional items from his knowledge of History, it will be found a valuable exercise. After considerable work of this kind, the pupils are in better shape to use the printed chronological charts intelligently, in case it be deemed preferable to employ them instead of the ones made by the class.

In preparing the manuscript lessons, it is a difficult thing for the teacher to decide what to use and what to leave out. He cannot devote much space to the mythical exploits of Capt. Smith, or he will have no space left for more authentic matter—matter which is more of the nature of history. Yet if the lesson is utterly devoid of interesting material, the pupils will certainly not take to it kindly. The solution of the difficulty may be found by adopting this method: Let the lessons deal only with important facts, and let them be supplemented by language lessons during the day in which topics of less importance, but of more interest are introduced. It will be found almost impossible to stir up much enthusiasm over the Stamp Act, but it would have to be a dull class indeed, that would not be delighted with an account of the Boston tea-party. The morning lesson may chronicle the retreat of Washington from Long Island: an interesting language lesson may be connected with it later in the day, by telling the story of the negro who ran to tell the British that the Americans were escaping in the fog, and how he fell into the hands of the Hessians, who, unable to understand him, held him as a suspicious character. I cannot pass this part without paying a tribute to the sign-language. It stands unrivaled for presenting in vivid light the stirring scenes of a battle-field, the daring and cunning of a scout, or the horrors of a naval conflict. The objection to signs, of course, is the fact that they are so fascinating to pupil and teacher alike, that the temptation is strong to employ them where the use of spelling or writing would be of more practical benefit to the learner. The practical benefit to be derived from signs is in instances when the use of spelling would be too prolix. If one has any prejudice against conventional signs, let him use speech or spelling, but let it, by all means, be accompanied by pantomime in the narration of these lighter incidents to which I have referred. Act out the scene. Actions speak louder than words to the deaf. As the class advances from grade to grade, there should, of course, be a corresponding decrease in the use of signs, and the pupil should be induced to read these narratives in print. Indeed the pupils of the ninth and tenth grades should, in my opinion, use text-books entirely, instead of lessons prepared by the

teacher. General History should not be taken up until the closing term of a ten-years' course, if at all. The History of the United States affords ample material in this way, and of a kind that is best suited to our pupils.

An important duty of the instructor is to teach the pupil how to study. In the beginning lessons—that is, in the lower grades—the memorizing of the exact language of the lesson may be advisable, it being understood that the pupil has a thorough knowledge of the meaning of the text, but as soon as the pupil has a sufficient command language to do so, he should recite his lesson in answer to questions, and should most certainly be required to vary the wording of the book. The questions on the lesson should never be seen by the pupil until the hour of recitation. It would be of interest to know by what mental process teachers ever arrive at the conclusion that set questions and answers should be learned by rote. So rigid are some in this matter that any attempt at originality is regarded with disapproval. For my part, I must say an incorrect answer, *indicating thought*, is far preferable to a mere mechanical response, however accurately worded in the language of the book or lesson. The charge is sometimes made that we do not require enough of our pupils: we smooth the way before them until it becomes, indeed, a royal road to learning, but the learning attained is not of a practical sort. Our aim should be—not in History alone, but in all studies—to stimulate and encourage original thought, and to this end we should so word our questions, that the pupils may not always be able, at first sight, to know what is wanted. In a lesson which covered the period of Madison's term as President, I asked "Why should this administration be of special interest to me?" There were several correct guesses, and one boy, a deaf-mute, made reply in these words: "Because you are a Hoosier, and Indiana was admitted to the Union during Madison's administration." That reply showed that the boy had *reflected* while studying. Whenever we can, in this way, link the facts of historical record with the commonplace incidents and relations of life, we give to the former a vitality that they would not otherwise possess. The imagination of the pupil and his reasoning faculties may be strengthened and led into a practical channel by such questions.

I think that our pupils as a rule leave us well-fitted to become citizens of the United States. The life of discipline in the Institution has shown them the wisdom of having laws, and also the wisdom of obeying those laws. But, if they have learned History aright, they have learned, moreover, to despise injustice, to vote intelligently, to feel proud of their country, and to wish for her continued prosperity. It has become the fashion in these days to speak lightly or in sneering terms of patriotism. In the popular estimation, every man has his price. The quadrennial hurrah over the election of "our candidate" secures the greater part of its volume from men who could not tell, to save their lives, what principle is involved in that election. If the study of History shall have taught our young men to exercise the right of suffrage wisely, and with a full sense of the responsibility that such an action involves, we shall have every reason to believe that this study is not by any means the least important in the course.

MR. ROBERTS, of Western Pennsylvania : I would like to ask a question, which is simply this : Would you approve of the use of questions in a book, twenty or thirty questions in a chapter, and to let the pupils take the questions and make out the answers ?

MR. CALDWELL : Yes, sir. That would be a very good exercise. I think it would be preferable to have them come incidentally, not by set questions.

MR. ROBERTS : I advise the getting of Mr. Eggleston's book ; the questions I think aid the pupils in understanding the language and aid them to think.

MR. CLARK, of Hartford : I wish to express my agreement with the statements made in the paper as to the benefit to the child which comes through the study of History. I think they are not over-stated ; but there was one remark that he made as to the amount of history that our pupils may be expected to study, and it seems to me that he places that in a very low degree. If I remember right, he stated that we need not expect our pupils to study general history until the tenth year, if at all. Now, in the school which I represent, the Hartford School, we are expected to take up American History in the fifth year and to finish it at the end of the sixth. In the seventh year we have plenty of time for the study of English History. In the year following we have an opportunity to take up the study of the World, or Physical Geography ; and that, in general, concludes the time that we have, eight years covering our course. But it seems to me that if we had ten years we should be able to give them a great deal more history.

MR. CROUTER : Do I understand that you finish the study of United States History in two years, beginning at the fifth year ?

MR. CLARK : Yes Sir.

THE CHAIRMAN : We will now take up the third paper, "School-room Difficulties and How to Cope with Them," by Miss West, of the Pennsylvania Institution.

SCHOOLROOM DIFFICULTIES AND HOW TO COPE WITH THEM.

By Emma F. West, of the Pennsylvania Institution.

Our experience in teaching has only covered eight years, seven of which have been devoted to the deaf ; but with each succeeding year, the weight of responsibility of forming the characters, so ready to impressions, of the children under our care, has so pressed upon us that it has been our constant prayer to be made more fitted to discover the peculiar failings of each child's disposition, and so act and guide as to aid each little fellow to overcome his particular difficulty, and not aggravate it until it becomes a disease too deeply implanted ever to be uprooted. Certainly we will be responsible, in a great measure, for the characters of those who come to us in their early, forming years. We know that vice and character seem to be inherited, as it were, and appear as if nothing would eradicate them, but often, in some of the

most hopeless cases, constant and patient watching, admonishing and assisting over the rough places, more than punishing severely and scolding, have done much to convert a useless, troublesome, unhappy creature into a happy, self-supporting citizen.

For such results one is amply repaid for all the weary and discouraging efforts.

Although our experience has not been over many years, yet, during that time, we have had some really discouraging subjects to deal with. Those starting to school when quite old, say at fifteen, and even as old as seventeen and eighteen; semi-mutes and semi-deaf, who have been out in the world mingling with the lowest order of men, having indulged in all the vices, even been in prison for stealing and disorderly conduct. But we have found that, even so, a wonderful and marked improvement has taken place in the very worst, and it was brought about not by severe punishment and noisy reproofs, but by patient smoothing down the ruffled feathers when in the height of angry passions, a kindly talk and reasoning together, but more than anything else, making the boy feel that we were his friend and understood the struggle he was having with his untutored passions; and that if he would only make an apparent effort to control himself, we would do all we could to assist him. And these little talks, we always found, were far more beneficial when given to him alone. In fact, no reproving done in the presence of others, more than enough to let the children see we did not approve of such conduct, had much effect. If you have a stubborn boy to deal with, nothing will make him more stubborn than to undertake to make him obey in the presence of the class. Often when we have seen a coming struggle, we have used a little ingenuity in getting the boy out into the hall to get something, and following have then reasoned him out of his stubbornness. This took probably three or five minutes, and the result would be obedience, and most likely the day ended pleasantly. When if we had have employed force, as we would have probably done in the first year or two of our teaching, it would have used up all our nervous energy for the day, besides wasting much precious time, thoroughly disgusting the class with the boy and teacher for taking time they felt belonged to them, and the boy would have been troublesome the rest of the day, and we should have gone home worn out, and with a feeling of worse than a lost day.

There are many trifling things done by the children which should be overlooked. Incessant nagging is irritating to the children, and, instead of making them better, often leads to their concocting some yet unforbidden scheme, to see what the teacher would say to it. It is never well to let a child see he can trouble or ruffle the teacher.

We all believe that actions speak louder than words, and yet how few of us carry out this very true axiom in our schoolrooms. All children are observant, but much more so the deaf, in fact, they get meaning out of an unintentional movement, or passing shadow on the face. We should try to keep out of our actions, and facial expression, all traces of annoyance and anger. While, on the other hand, we cannot give too much expression to our pleasurable feelings, and our approval of their good conduct.

A teacher's disposition and peculiarities are readily imbibed by the

children. If the teacher is nervous and irritable, even *even-tempered* children will, if long under such a teacher's influence, grow like her. You will usually find the best disciplined class, and the happiest, in the room of the teacher who never loses control of herself, and never forgets her own dignity by a tirade of invective, showered upon the children, and often couched in language over the children's heads. The only good such measures *may do*, is to relieve the teacher's pent-up anger which might break out in a more serious form, for we have heard of teachers throwing books at their pupils when in anger. Imagine the effect of such a teacher upon a class of young, impressionable children! If we wish to control and well discipline the boys and girls under our care, and who are so dependent upon us for every idea, we must first learn to discipline ourselves. It matters not how scholarly a teacher may be, nor how gifted in lucidly explaining the difficulties of the English language to the deaf, if that teacher is not a thoroughly good person, having self under perfect mastery, and the children's future happiness and welfare thoroughly at heart, she will not be a successful teacher, and it would be better for all concerned, if such a person would seek other fields of labor.

In order to teach at all, one must have perfect attention, and if the teacher's mind is divided between two or three odd children at work at their seats, because they are not up with the class, and the recitation in hand, her work will not be satisfactory to herself nor to the children. And to put them all together is a strain on the backward ones which is detrimental to their progress, in fact, so injurious, that we doubt whether some nervous, ambitious children get over the effects all during their school life, and instead of having the encouragement of little victories over hard places, they have a weary sense of trying to grasp something which is airy and visionary and always just a little beyond their reach. By backward pupils, we mean not backward from stupidity, but from entering school at a time when there was no room, perhaps, in the grade in which they should go, or probably were too large in size for it, or not a grade just suited to them.

If, on the other hand, you make the lessons simple enough for the slower ones, the more advanced children will feel that their time is being infringed upon, that the teacher is not doing her duty by them, and, naturally, if they are far-seeing enough to discover that it is not altogether the teacher's fault, but that she has to move slowly for the few, they will take their spite out on those poor, unoffending creatures, and in many little ways, unseen by the teacher, make their poor lives even more unhappy than they are, and make them lose what little courage the teacher had succeeded in planting in their breasts, by, perhaps, out-of-school work. To be sure, the teacher can help matters by this out-of-hours teaching which she may be perfectly willing to give, but here she meets with another difficulty. In our institutions, where the children have shop work to do, and household duties to perform, there is very little of the child's time she can get without encroaching upon their precious hours of recreation, none too many for growing children.

We feel there ought to be something done to remedy this poor classification, which prevents the teacher from doing her best work, but, what is worse, it is so discouraging to the children. But when our classes are limited to a certain number, as they are in most of our in-

stitutions, and where we are always having children leave the school before completing the full course, and others enter, at all ages and in all conditions, congenitally deaf, with no knowledge whatever ; others with speech, but no written language ; still others with written language, but so full of mistakes that it would be a far easier task for the teacher if they had no knowledge at all ; and others still, with, perhaps, a fair acquaintance with written language, but having had no instruction in arithmetic, geography and history. Now what is to be done with these children ? Are they to be put into classes to fill up where some have dropped out in order to keep the allotted number, but where perhaps, in one thing, they may seem up to the class, while in all others they are not fitted at all ?

Then in schools where the classes are examined semi-annually by the principal and directors, and the averages of the examinations are made, the classes in which these spots occur are going to fall far below the averages of the well-graded classes. Perhaps the teachers of the former have worked harder and made more real strides in individual cases than those of the well graded classes where the averages are high. In the poorly graded class, the teacher's reputation suffers in consequence. You will say that should not be the case, that every one would take into consideration the material she has to deal with. We beg to say that one would be apt to think so, but experience and our knowledge of human nature have taught us differently. Averages will be compared, and material will not be taken into consideration, and, what is more, no one but the teacher herself really knows all the difficulties and peculiarities of each individual case, and often the children who make the best show before strangers and principals are the ones who try the teacher's power the most, and are frequently the hardest to teach the little things, such as punctuation, capitals, etc., which pull down the averages at examination. We are supposed not to teach for examinations, but to teach knowledge, and yet a teacher's ability is often judged by the average her class can score in examination. We do not say always, but often. We would rather teach a well-graded class of fifteen than a class composed of eight, where the grading was poor.

In some well-regulated schools for the hearing, they have what they call an annex. Thoroughly competent teachers have charge of it. In this department are placed all the children who do not just fit in the regular grades. The teachers of this department devote themselves to getting the children suited to some particular grade by working up the branches, in which they are deficient. Could we not have such an annex ? If we did not care to have teachers just for this department, could not all the teachers in turn take charge of this class until they were ready to be classified ? Or, having an extra teacher, who could go from class to class working up the weak points, would overcome in a measure this difficulty, we should think. But as long as each teacher *must* have a certain number of children, and our schools have no extra teachers, we fear the principals, children, and teachers will have to suffer from poorly graded classes, and, in consequence, the course of study will not be so extensive.

DR. GILLETT : I want to express my appreciation of the paper that

the lady has presented us, and I know that we are all glad to hear from the schoolroom.

THE CHAIRMAN: The last paper for presentation this evening will now be read by Prof. J. H. Eddy, of the Central New York Institution.

THE PHYSICAL TRAINING OF PUPILS.

By Jonathan H. Eddy, of the Central New York Institution.

While we take so much pains with the mental development of our pupils, the physical should have its proper care as well. We can hardly be doing our duty by our young charges, if we do not do all we can to give them a sound body with a sound mind. It is gratifying to know that this subject is coming to receive the attention it deserves in the institutions for the deaf. In some of them, as at Kendall Green, there are well-equipped gymnasiums, and well-qualified persons in charge.

It is not necessary, here, to urge upon my hearers the importance of a good physical condition and development: all realize the intimate connection between the mental and physical being. How much more and better work one can do when his stomach and liver are in good order, than when they are not: how much brighter life seems, and how much more energetic we are, when in the full vigor of health, than when rheumatic and dyspeptic pains are harrying us, or the bile in our liver has "slopped over." In the schoolroom the same conditions affect our pupils. Some of them show a remarkable instability in their recitations and class work: one day they are all attention and diligence, and the teacher's heart warms within him at the encouragement and appreciation his efforts receive; on another day, how different! the same pupils but half know their lessons, and are unable or unwilling to give you proper attention and effort, on account of some ailment.

It is noticeable that those teachers have the most influence with their pupils, who interest themselves in the various sports, if they do not take an active part in them. The pupil feels that they sympathize with him when interests are the same. A principal, who encourages and takes interest in the games of his boys, is sure to enjoy their hearty and enthusiastic liking. It seems to me that such sports and games as football, baseball, la crosse, the athletic contest, etc., should have even more encouragement than at present. If there is a lively interest kept up in them, and occasionally the school routine is a little relaxed on their account, nothing will be lost. When the interest of the pupils, or more particularly of the boys, is encouraged in this way, it will keep them out of mischief and preserve an excellent *esprit de corps*, which, as it were, oils the machinery of discipline, so that more can be accomplished in other directions and without friction. Of course they must remember that the time for work and the time for play must not encroach upon each other, but I can well remember how, during my school days, Dr. Peet once dismissed school a little earlier than usual, that we might see a boat race on the river at that

hour. How our hearts kindled towards him, how hard we tried to show our appreciation by "being good" afterward. How sternly we frowned on would-be mischief makers at the time.

While sports and games are to be thus commended and encouraged, they do not accomplish symmetrical physical development. All sports and games are more or less one-sided, though there is great difference in this respect. Thus, for instance, if rough horseplay is avoided, there are no sports that more thoroughly exercise the whole body than football and la crosse. But in these games only a few can take part, and only these derive any benefit from the play. Again, these sports do not aim to develop the weak into the strong, and to remedy bodily defects and deformities. They take those who are already strong and agile and make them more so. Thus it will be seen that they do not "fill the bill." A through system of gymnastic exercises is needed.

There is no real antagonism between gymnastics and sports. The gymnasium affords the best preparation for success in the field, while all are benefitted by it. Sports supplement gymnastics. The leading athletes now devote considerable time to developing every part of their physiques, and not only such as are brought into play in their specialty. In this way they win the lead.

The Germans and the English illustrate the extremes in this matter. The Germans practice an admirable system of exercises in their Turn Halls, but give little or no time to outdoor athletics. With the English, on the other hand, it is all out doorsports and as little of the gymnasium as possible. This is the better way, but the English boys, every one of them, unless unusually delicate or sickly, participate in the sports, so that nearly all get their thorough training: with us this is not so much the case. The best plan is to thoroughly train and develop the body in the gymnasium for the sports of the field.

A considerable number of our pupils, especially those who became adventitiously deaf, carry other traces of the disease than that deprivation; such should have careful attention and exercise. They are often overlooked and allowed to mope around indoors to their detriment: a tendency to disease is thus intensified, or seeds of it in their systems vegetate. A rational system of exercise would remedy this.

The Young Men's Christian Association has paid special attention to this subject, as it forms one of their main methods of attracting young men. There are many able men in their ranks, who have made it the study of years and their life's work. The old-fashioned gymnasium and its forms of exercise are now discarded for better. In Springfield, Mass., there has been established a flourishing training school for workers in this association, and physical training is made only second to religious. In this school has been devised a most thorough, safe, and effective system of exercises for uniform and symmetrical physical development, and many special ones to remedy bodily defects and to build up weak spots. I will give an example of the regular drill later on. It has been found that quick movements of the body and limbs without any apparatus, or, if any, of the lightest kind, develops the best quality of muscle and nerve. The power exerted by muscles does not depend so much on their size as on their contractile power and the nerve force that governs this. Such light exercises have the effect of making elastic muscle and strong nerves. A regular course of exercise

of this kind may for some time increase the size of the muscles but little, but that is no test of the real effect. The material of the muscle will have been made over again, and the fat replaced by useful fibre, then the power of the nerves will be doubled. So that the individual is much stronger than before. The body will have become much more supple, easy, and graceful in its movements. We sometimes see a person, who is much stronger than another who is greatly his superior in size and weight, not only stronger in proportion, but absolutely so, as shown in trials of strength. This is owing to such difference in the quality of their nerves and muscles. The use of heavy weights may produce big, knobby muscles, but they are of little use. When at rest, the best muscle is not stiff and unyielding, but very elastic.

The body and limbs are in themselves their own best apparatus. One who knows how to use them properly, can, without other help, get sufficient exercise in their use to develop every part to the utmost limit. In the story of Monte Cristo, there occurs a striking illustration of this, where the method used by Edmund Dante, in prison, to attain strength is related. It may have been only the ingenious fancy of the author, but the effects of such exercise with the body and limbs are exactly what is there described.

Teachers, from their sedentary occupation, need some kind of exercise to preserve their health, and enable them to meet the nervous drain. The most simple means will answer this purpose. Thus, if one's residence is a few blocks from the institution, the walk to and from work can be utilized. If one covers the distance sauntering slowly along, perhaps conversing with a fellow teacher, with the chest impeded and contracted, no benefit results to any muscle, and the very least from the fresh air. If the head were kept back, and the chest open, and the step made brisk, the short walk would give an invigoration that would last all day and make the exhaustion at the end less. Regular practice of the drill would be still better.

The supervisors in charge of the pupils are the persons who could easiest take charge of such work of physical training. It is not necessary for a physical director to be an uncommon athlete or acrobat, but one who can use the apparatus in the right way, and who has studied the subject well. The ideal director is one who is as fully posted in anatomy and physiology as a surgeon. If he does not possess such knowledge, it is necessary to have all the young people examined by a competent physician, to make sure that their internal organs are all right, before putting them in training. It would be easy for one wishing to be qualified for the charge of such training, to obtain the special knowledge of the system I have mentioned, by joining the ladies or gentlemen's class in the Young Men's Christian Association gymnasium, in the nearest town. Almost every Young Men's Christian Association of any size in the country has it in use. Or, better still, a month or two spent at Springfield would make an expert of anyone.

In the simple matter of the carriage of the body and correct walk, a great improvement could be at once effected among our pupils, and would be a great feature of the institution's appearance. Some of the gymnastic exercises introduced on Exhibition Day, would make a pleasing and novel change.

I will now illustrate the manual of simple exercises, comprising about sixty different movements. Part are made without, and part with the dumb-bells, which, if used, should be of wood, and of but one or two pounds in weight. The time consumed in going through it varies from five to twenty-five minutes, according to the times which each movement is repeated. It would be easy to have part of them practised by the pupils every time they are formed in line to go to meals, chapel, or the dormitory. Only a few movements at a time should be practised at first, though apparently so easy, if all are at once gone through with, with any earnestness by a beginner, he will feel stiff and sore from the crown of his head to the sole of his foot for some days afterward. It is a very important point that the correct position is maintained through the work. Unless the chest is kept free and open, the vital organs within will not have room for play when the increased demand is made on them, nor room to develop in unison with the rest of the physique. I have achieved good results with the boys in our school, and the girls also, whom I reached by first teaching their supervisor the exercises and she in turn teaching them. Of course it is necessary that they should be so dressed at the time of practice that there be no compression on the chest and body. These movements are in five classes :

- I. Free exercises, mainly for the respiratory organs—without bells—1 to 10.
- II. Leg work, for the lower limbs, with or without bells—1 to 13.
- III. Body work, with or without bells—1 to 16.
- IV. Arm work, with or without bells —1 to 10.
- V. Extension exercises for stretching the muscles, etc., with bells—1 to 11.

THE CHAIRMAN : Opportunity is now afforded for the discussion of this paper.

DR. E. M. GALLAUDET, of Washington : I take great pleasure in expressing my approval of the paper just read. I am sure that few subjects of greater importance can be considered, although physical development is not the aim and object of our education ; yet without physical development, the results we do attain will be more or less interfered with. I am sure there are those in the convention, who will be glad to testify to the benefits they have derived from compulsory physical training in the college at Washington. It is now ten years since we established a gymnasium there, in which all our students were to have compulsory physical training. We endeavored to fit up a good gymnasium. We secured the assistance of Dr. Sargent, of Cambridge, whose work I have alluded to in former conventions, and the results, as I have observed them in our college, upon those who have had the benefit of them during the last ten years, have been not only a help to the students in their development intellectually and morally, but have helped in the training of the college, helped to round out the development of the men. The suggestions of Mr. Eddy are, I think, very valuable. Where nothing more can be given than calisthenic exercises, it is desirable certainly to give them ; but my own hope is that the time is not far distant when all the schools for the deaf may have regularly established gymnasiums, where suitable training can

be had under competent teachers, and where the exercises and drill shall be adapted to the wants of each individual. A few years ago, when ex-Secretary of State Bayard was in the Senate, and a member of the Board of Directors of the college, he was present at a certain anniversary—I think it was six years ago, when the young men, who were then to graduate, had been under physical training during their entire course. Secretary Bayard, on that occasion, turned to me with this remark: "You have a few young men here on the platform to-day, not a large number, but, without exception, they came upon the platform with a firm, assured, manly step, and all of them seem to be well developed physically; I found no exception." Said he, "Is that peculiar to the deaf?" I said: "Do you remember, Mr. Senator, that this class is the first of our college that has had physical training during its entire course?" Said he, "I had forgotten that. It is your gymnasium that has done it." I felt pleased that he should notice the benefit these young men had received. I can not overestimate the value of this physical training in the college or the school.

DR. GILLETT, of Illinois: Mr. Chairman, this subject was presented to the convention in California four years ago, and was listened to with a great deal of interest. For four years we have been conducting the Illinois Institution with a view to symmetrical physical development. My first impression, after having launched into that enterprise systematically, was surprise at its aid in the school work. I found this, with a class of youth with whom we had experienced great difficulty in arresting attention in the schools, one of the most helpful aids in cultivating habits of attention that we have ever practiced. Mr. Cloud, now Rev. Mr. Cloud, has been our instructor in physical exercise for several years. He was, as you all know, a graduate of the Deaf-Mute College at Washington, having received instruction in physical culture there, and afterwards from Dr. Anderson, in Brooklyn, and subsequently from Dr. Sargent, in Boston, and had become well posted on this subject.

I commend a great deal, Mr. Chairman, that was in this essay, but I think the writer of the essay did not lay sufficient stress upon the necessity of thorough qualification of the instructor. Physical exercises, Mr. Chairman, should be conducted with as much precision, with as much good judgment, with as much accuracy, with reference to the special needs of the individual, as the exercises of the school. There is nothing that helps one to study, and to learn, and to discharge any duty, better than a good physical development.

I found, when in the service of the Christian Commission during the War, that it was very hard to talk with and interest a man on social or religious questions when he was hungry. If I could take him some simple article of diet, I generally found close and speedy access to his heart. Well, Mr. Chairman, it is very much so with us in our mental development. If we have a healthy body, we may reasonably expect to have a healthy mind; but it is exceedingly difficult—almost impossible—for a healthy mind in a diseased body to perform all the functions of the mind properly.

Mr. Chairman, this is a larger subject than we are apt to imagine. This training should be adapted to the wants of the different individuals and different classes of persons. The Swedish Movement is now

received with favor, not only to develop health and vigor, but to correct ailments already existing. In every one of our institutions we need not only a gentleman for the instruction of the boys in gymnastic exercises, but we need, also, a lady for the instruction of the girls and young ladies. Acting on this conviction, I have employed a gentleman for the instruction of the boys, and a lady for the instruction of the girls, in the Illinois Institution.

There are reasons for this, unnecessary to enlarge upon here, some of which could not be spoken of probably with entire propriety in a mixed audience, but I assure the members of this convention, from the standpoint of experience, that few things more helpful can be done for the young ladies of your institutions than to place them under good, systematic, judicious physical instruction, which is often in a direction that a gentleman cannot properly give them. It is as much due to young ladies that they have a physical education suited to them, as it is to young gentlemen that they have physical instruction suited to them.

You will kindly permit me to add, Mr. Chairman, that at the Illinois Institution we have a gymnasium equipped in a manner excelled by but few in this country.

MR. CLARKE, of Arkansas : If I should go before our Legislature and say *gymnasium*, they would probably say that the cotton field would afford all the exercise that was needed. When I went down there I found that the boys had their out-door games, and were reasonably well supplied with exercise, but the girls did not. We have made some considerable effort to train our girls in calisthenics. Mr. Michaels, one of Dr. Gallaudet's boys, asked me if I would supply them with proper dress and a little apparatus, and see what he could do. The total expense of dress and apparatus all together, taking them in classes, was less than fifty dollars. We have wands, dumb-bells, Indian clubs and rings, all turned out by home manufacture, cheap, strong and useful ; and I notice that those girls who have been longest under his care have improved very decidedly in their walk and carriage, and their parents at home have noticed it and spoken to me about it. I am inclined to think that in the future we will devote very much more attention than in the past to this matter. I never expect to have a gymnasium, but I expect to have calisthenic drill very much like what Mr. Eddy showed on the platform. In our institution we generally take a class of ten or twelve, and put them through free hand movements in which we combine sign-making with their calisthenics. You would be surprised to see what a pretty sight it is to see ten or twelve pretty girls in their gymnasium suits, how it takes with the old folks, and how much good it does the children themselves.

MR. GORDON, of Georgia : I am always glad to see young men and young ladies go through gymnastic exercises. A teacher is under obligation to use all the means in his power to secure to his pupils a good physical training. It is his duty to regulate their labor, and exercises, so as fully to develop all the powers, and call into exercise all the functions of their physical system, to accustom them to hardship, and render them more patient to study their lessons. I was much pleased at seeing a young man in Boston, Massachusetts, the other day,

go through the same exercises in training himself. We cannot do as much good in the school-room for them as we should, without giving them physical training. Give them physical, intellectual and religious training, and that constitutes the foundation for the pupils to build upon in life. When God said, "Let us make man," He meant to make him *man*, spiritually, intellectually and physically. The teacher should inform himself of the peculiar habits of his pupils, and consider what sort of education will most conduce to his future happiness and usefulness. Therefore, to develop our muscles will make the mind better for intellectual training. We have not only schools in the South to teach pupils books, but training schools. Most of the colleges have blacksmith shops, printing, and industrial training for boys and girls, and just as soon as the pupils enter these schools, they begin to give them physical training and intellectual education. Therefore I congratulate the young man for his interesting paper on physical training of pupils.

DR. PEET: I am very grateful to Dr. Gallaudet for calling the attention of those present to the desirability of a gymnasium; and I hope that the report of the discussion this evening will call to the minds of the Board of Directors of this Institution the necessity of establishing a gymnasium, in conformity with the united desire of the teachers and of the pupils. There is no one improvement for the Institution which our boys are more anxious for than that; and I have no doubt that such discussions as the one we have had this evening will lead our Directors to look upon the project with greater favor than they otherwise would. Still, we are not without systematic training in that respect. Our boys have a boat club on the Hudson River. They have several base-ball clubs, and they go out and have contests with other young men, in which they often win. They have had contests with the colleges, and in addition to that, every day, at morning and afternoon recess, and always one hour on Friday, they go through a regular, systematic military drill. The teacher has taken up "Upton's Tactics," and every single movement of the school of the soldier is required of our boys.

MR. GOODWIN, of North Carolina: I want to bear testimony to the value of such exercises as Mr. Eddy has set forth in his paper. In our institution we have not a gymnasium, that is, a regular gymnasium, and we have no uniform or special dress for the exercises; and I appreciate his paper still more because he does not require them. For a long time we have had gymnastic drills in our school; a drill of twenty minutes daily is well worth what it costs. During one session I gave a drill—I think there were 72 in the class—gave it daily for from 8 to 20 minutes; and at the close of the session, the principal remarked to me that he had noticed that there were very few cases of headache that caused dropping out of school during that session, fewer than ever before. Dumb bells and wands were the only apparatus that we had, and the exercises were such as given by Dr. Dio Lewis, in his "Manual on Gymnastics."

MR. SWILER: I desire to commend the sentiment of the essay that has been read here on Physical Culture, and with those that have expressed themselves upon the subject, rejoice that it has been brought into such

years past we have been very successful, I think, under embarrassing circumstances. We first started to carry on gymnastic work with a class of the older boys, one of the teachers giving them gymnastics and drill. Then we had a single class of girls, under the instruction of a teacher. They received instruction about four times a week, but they had to climb up to the attic to get it, which was the unpleasant feature in the case.

We have now an annual field day, which is a great day in Kansas. All the people round about come to our annual "Field Day" to see the boys drill; and it is a very interesting sight, so much so, that it is looked forward to with much interest. The most is made of the day that is possible. Handsome printed programmes are distributed and sent as invitations to citizens of our village, and kept as souvenirs by our pupils. Prizes are given for various events, and there is a gold badge reserved for the champion of the day. This badge is known as the "superintendent's badge" and the winner is allowed to wear it till the next field day, when it may be taken from him by a successful competitor.

I think much can be done if we endeavor to do the best with the appliances we have, though I am a firm believer in a well equipped gymnasium both for boys and girls. That the Kansas Institution will one day have one, I still hope, though, the day is not present.

DR. GILLETT: Before adjourning I want to offer a motion. I will make only a very few remarks in support of it.

I move that the Business Committee be instructed so to arrange the business of the convention that we may adjourn *sine die* some time on Wednesday. It is important for some of us who must go away, to make arrangements for our transportation early. If we do not adjourn until Wednesday, we shall have then been here seven days, and I think we ought not to keep these friends, who are so kind, in uncertainty as to when we will go away. It costs several hundred dollars a day to lay in supplies for this convention, and they do not want to be left with the convention on their hands without supplies, nor do they want to lay in very much of a supply over and above what will be needed. I think the time has come when we should determine when the convention will consent to adjourn. Some of the papers will have to go by the board and wait until another time; and I move that the Business Committee be instructed to act as I have indicated.

DR. PEET: I would like to say that I wish Dr. Gillett had based his argument on other motives than the convenience of this Institution. This Institution is prepared to entertain the members of the convention to the last moment at which they find it convenient and useful to be present.

THE CHAIRMAN: All who are in favor of Dr. Gillett's motion, which I understand to be, that the Business Committee be instructed so to arrange the order of business that the convention may adjourn not later than Wednesday evening, signify it by raising the right hand. Contrary minded, by the same sign.

The motion is carried.

MR. S. T. WALKER: I move that the session do now adjourn.

THE CHAIRMAN: You have heard the motion. All who are in

favor of it will manifest it by the usual sign. Those opposed, by the same sign. The session is adjourned.

FOURTH DAY.

TUESDAY MORNING, AUGUST 26.

The Normal Department of the Convention was called to order by Dr. G. O. Fay, of Hartford, at nine o'clock.

THE CHAIRMAN: Our first exercise will be a paper on "The True Order of Grammatical Principles," by Dr. Job Williams, of Hartford.

THE TRUE ORDER OF GRAMMATICAL PRINCIPLES.

By Job Williams, of the American Asylum.

The most difficult task, set for the teacher of deaf-mutes, is to impart to his pupils, a thorough knowledge of written and spoken language. Unlike every other teacher he has to start with a perfect blank in this respect. The difficulties far surpass those of teaching a foreign language to a child already fluent in the use of its mother tongue. Language under all circumstances is learned chiefly by repetition, and under no circumstances can the deaf child have more than the smallest fraction of the amount of practice in language that the hearing child ordinarily has. Therefore, every help should be given him, and means should be devised, to the greatest possible extent, to aid him in economizing time and effort, and to teach him to work within definite lines. Not that rules and principles should be paraded before him, but that, under the skillful guidance of the teacher, he should be led, all unconsciously to himself it may be, to work systematically under orderly arranged principles, and to be sure of his ground, as he is led on step by step.

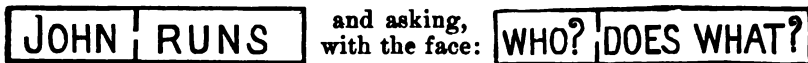
It should be constantly borne in mind by the teacher that he will secure most progress, if he makes haste slowly. Work half done will surely have to be done over, and that, too, when a partial knowledge of the subject has taken from the pupil the keen interest that he had in it, when it was first presented to his mind. It will be a saving of time to do thoroughly whatever is worth doing at all.

With these few introductory words, let me call your attention to one way—a way which years of testing in the school room, with both bright classes and dull ones, has proved to be a most excellent way—of teaching the English language to deaf children.

The first step is to teach the pupils, through the names of a few of the most familiar objects, to use their fingers in writing and manual spelling. This accomplished, and enough common names mastered to cover all the letters of the alphabet, all work in language thereafter should be in complete sentences. But, in order that one difficulty may

be met at a time, the first form of the sentence should be its shortest possible form—a noun and an intransitive verb *e. g.*, *John runs*. In every case the action should precede the writing, so that the language may convey a clear and vivid idea. For a long time no signs should be used *as the foundation for sentence writing*, but *actions*, and actions *only*. A little later graphic pictures, also, will serve well as aids for this purpose. No sentence should be used at this stage, which does not describe an action just performed in the presence of the pupil, or clearly portrayed in a picture still before him. Do not misunderstand me. I do not say use no signs in the schoolroom at this point, use them freely to wake up the minds of the pupils, but not yet as the foundation of sentence writing.

From the first introduction of the sentence, the pupil should have his attention called to the two kinds of words needed to make an assertion, —name words and action words, but do not bother him with names for them, nor with definitions. This may be conveniently done by placing the sentence in a diagram thus,



By simply asking these questions with each sentence, and putting the sentence into a diagram, the pupil soon absorbs the idea that there must be a name word, and an action word to make an assertion. By constant practice it will become so ingrained in his mind that he cannot forget it. This is the foundation of all correct sentence building, and the pupil who has mastered this principle has taken a long stride in the acquisition of language.

The symbol for the noun and verb may be placed over the diagram, but no stress should be laid on them, nor time spent over them. Constantly before the eyes of the pupil they will soon be fixed in the memory.

Just here let me say, that, sticking to the principle of keeping the difficulties as few as possible, it is well to use but one tense of the verb for a long time. We prefer the present tense, as it contains the root of the verb, the most essential form to fix ineradicably in the memory, and the form in constant use in questions, and in the compound forms of the verb.

A class should be kept on this simplest form of the sentence, until every pupil has fully grasped the idea of the sentence, and its two essential fundamental parts, and has acquired quite a variety of nouns and verbs. During this practice the pronoun I may be thoroughly taught, by using the different members of the class in performing actions, and having each in turn substitute the pronoun for his name, all the rest of the class using the proper name. When once the pronoun is understood, insist upon its use in every case, till it becomes a part of the mental fiber of the pupil.

As the next step introduce the transitive verb with its subject, illustrating by actions, and using the visual help of the diagram to fix it in the memory. *John eats cake*.



Again give a great variety of practice, presenting many sentences to the eye in diagrams, at the same writing the sentences beneath them, and, if you please, using a colored crayon to call special attention to the verb. At the same time keep in constant practice every principle previously acquired that nothing may be allowed to slip from the memory. This rule should be kept constantly in mind as we progress. "But that will require a great deal of time," you may say. True. But it will be found that it will more than pay in the long run. Having taught the use of the objective case, introduce the objective case of the *personal pronoun* in the first person, illustrating it as was done in the nominative case of the same word.

The next step will be to introduce the *adjective element—noun modifiers*—and as the clearest and most easily understood take the possessive case. Again illustrate the relation of the parts of the sentence by the diagram. *James eats Mary's apple.*



Here introduce the *possessive* of the *personal pronoun* in the first person, still giving no names nor definitions, but by giving extended practice fix the word by illustration. Then proceed to introduce *adjectives*, first with the object, and then with both the subject and the object.

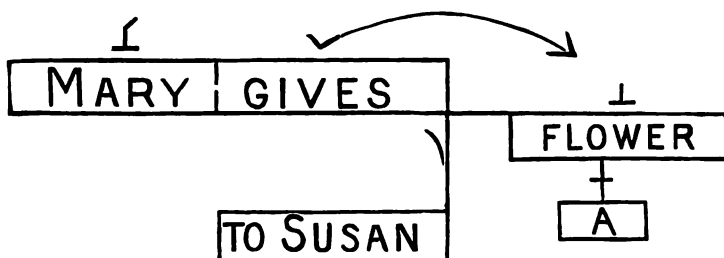
While practicing on the adjective element, introduce *numeral adjectives*, and as this will involve the introduction of the plural form of the noun, use them now only with the object, so as to avoid bringing in at the same time another new difficulty, a change in the form of the verb. But as the next progressive step introduce the plural subject.

Next in order introduce the *personal pronouns* in the third person, nominative, singular, and when these have been well fixed by practice proceed to the plural forms, following these with the nominative plural, and then the objective plural of the first person, the singular forms of which have been taught already. In all this use the different pupils as actors, the actors using the first person, while the rest of the class use the third person of the pronoun. Do not allow pupils to use pronouns in the third person when no antecedent has been expressed.

Persistent and patient practice will be required to fix the pronouns thoroughly in the minds of the pupils, but they should not be left till

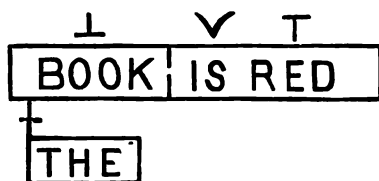
the task is accomplished. The time will be well spent, and at the same time a great deal of practice on every principle already taught can be worked in.

The next principle to be introduced is the indirect object, again using the pupils and the diagram to illustrate. *Mary gives a flower to Susan.*



This principle will be easily comprehended, and a little practice will fix it.

Passing on to the next step, teach the predicate adjective with the copula *to be*, giving thus the second form of the sentence. Hold up before the class a red book and ask them what color it is. They will all answer "red." Then write, *The book is red.*



Repeat this process with various objects, until the form is well fixed, and then let the pupils describe in this way anything about themselves, or in the room. It will be interesting work for them.

For the next step forward we would introduce *the negative form of the verb*, and thorough practice in this will give an excellent opportunity to review all the principles passed over.

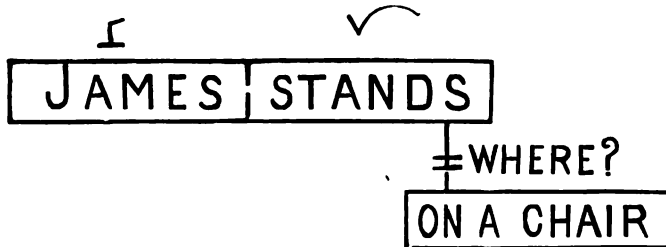
MARY DOES NOT CRY

JOHN DOES NOT RUN

JAMES IS NOT TALL

Next we would take up *adverbs* and *adverbial phrases*, confining ourselves for the present to those of *place* and *manner* in answers to the questions *where?* and *how?*

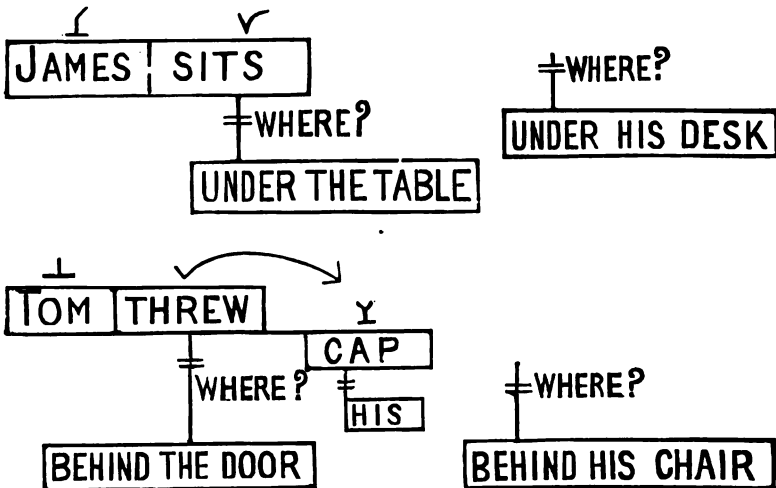
Here, as hitherto, first bring out the idea clearly by actions, then give the language. Stand James on a chair, and the class will write, *James stands*. Then ask where?



Then, with the same verb and the the same preposition, stand different pupils in half a dozen different places teaching the adverbial phrases as units.

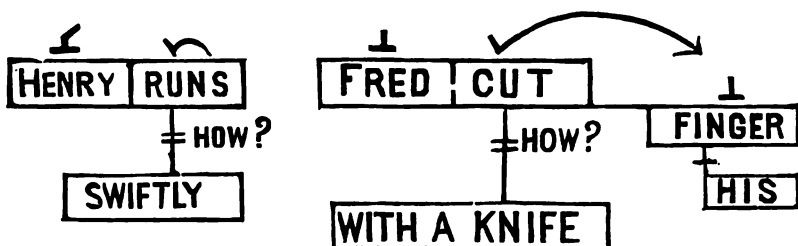


Then take up other phrases, giving practice enough on each to fix it firmly in the mind. Always remembering to teach the phrase as a unit.



So with *over*, *into*, etc.

Adverbs and adverbial phrases of manner answer the question *how?*



Now we are ready for the *interrogative form* of the verb. Begin with the simplest questions, and such as can be answered by Yes, or No. Hold up a red book and write on the slate, *Is the book black?* Then point to the book and ask the same question with your face. The response from the whole class will be negative. Then let the teacher write No, after the question. Try other colors in the same way in the question before hitting the correct one, the teacher writing both the question and the answer. Then give the question, which will give an affirmative answer, and write, Yes. Ask questions about anything, or anybody, that will engage the interest of the class.

For a long time, no attempt should be made to have the pupils write questions, but the teacher should do that, and the pupils write the answers. The daily reading of questions with care enough to answer them correctly will, after a while, fix them in their minds, and when the time comes to require the pupil to ask questions for himself, it is surprising to find how nearly the task has been accomplished already. In this, as in many other things, much time is often wasted, and labor poorly spent in trying to teach our pupils things, for which the way has not been prepared properly.

A large amount of practice should be given to questions, taking up but one form at a time, and fixing that before preceeding to the next.

As the second form, apply the question to the subject—*e. g.* Who reads? What flies? etc.

Thirdly to the object. Whom? What?

Fourthly to adverbs and adverbial phrases. Where does John live? How does Mary write?

Fifthly to noun modifiers. Whose? What sort of? How many? etc.

Sixthly to the predicate. What does John do?

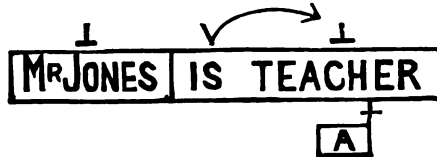
Pictures will furnish a most useful basis for questions, sharpening the perception of the pupils and quickening their thinking.

From this time on to the end of the school course questions in great variety, by the manual alphabet, or by writing, or by both, should form a part of the school work every day, and answers should be required of the pupils through the same medium. The questions should be so framed as to require the pupils to think as much as possible in order to answer them properly. That this may be done to advantage, there must be some basis for the questions. This may be furnished either by a good picture, or a story told clearly in signs, or by a printed story adapted to the standing and capacity of the pupil and memorized. In the older classes text books furnish the material.

The predicate nominative, which might properly enough succeed

the predicate adjective, we defer to this point, and now introduce the *third form of the sentence*.

For example, *Mr. Jones is a teacher.*



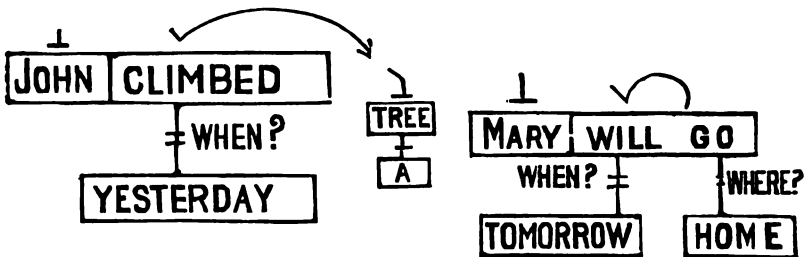
Hitherto, we have used but a single tense of the verb, but we have now reached a point, where the pupils should be taught to consider thoughtfully, the different forms of the verb to express present, past, and future action. These ideas will be very readily understood, and only thorough practice will be necessary to make the proper verb forms a part of the pupil's permanent mental furnishing.

As a necessary accompaniment to the tense forms, we need to introduce here *adverbs*, and *adverbial phrases of time*.

In making tense distinctions, illustrative sentences should be chosen carefully, and should express facts known to the class, definite actions, performed at definite times, and, as often as possible, the pupils should be the actors. In other words language should be living language.

John climbed a tree yesterday. (A fact which all the class know.)

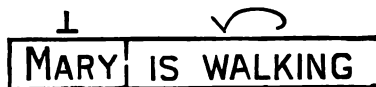
Mary will go home tomorrow.



A short journal exercise every morning, will furnish a little good practice in tenses, but it should be followed up persistently in every written or spelled school exercise. This practice will also furnish an excellent opportunity to review, without tediousness, all the work previously gone over.

As the next step forward, we introduce the form of the verb expressing an *action in progress*.

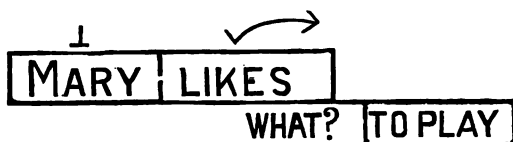
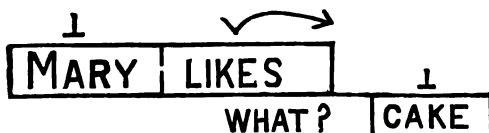
Mary is walking.



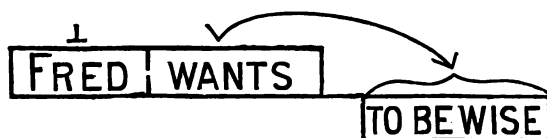
For illustrative sentences have different members of the class perform various actions, and let the teacher describe each action, while it *is still going on*.

Our next step is to introduce the *infinitive* as the *direct object* of the verb. The class are entirely familiar with the use of the noun as the direct object, and, by the use of the diagram, they easily see that the infinitive may bear the same relation to the verb.

Mary likes cake. Mary likes to play.



After this form has had sufficient practice, take the *infinitive to be*, with the *predicate adjective* as the object.

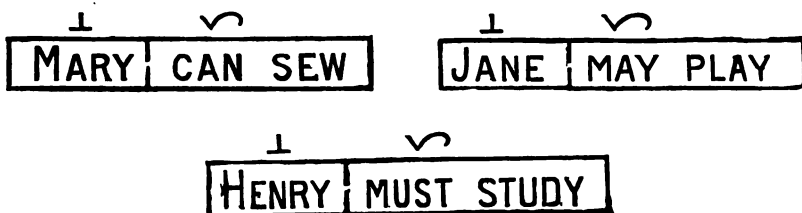


Then the infinitive with its subject as the direct object.
Miss Smith wants Fred to be wise.



Let questions help fix this principle. What does Mary like? What does Fred want? etc.

Moving forward a step, we next introduce the potential form of the verb.



Take up but one form at a time, and before leaving it teach the corresponding interrogative and negative forms.

Next show that *adverbs* and *adverbial phrases* may be used with the verb *to be* to form the predicate.

⊥ ✓ ¯
 JOHN IS HERE

⊥ ✓ ¯
 ARTHUR IS IN THE SHOP

We have now gone over the five essential forms of the simple sentence. It will be well to keep a chart of them constantly on the wall for ready reference, and to show the pupil that the assertion in any sentence grammatically constructed, is based upon one of these forms.

I ⊥ ✓
 JOHN RUNS

II ⊥ ✓ ¯
 FRED IS TALL

III ⊥ ✓ ⊥
 MISS SMITH IS A TEACHER

IV ⊥ ✓ ¯
 JAMES IS HERE

V ⊥ ✓ ¯
 MARY IS IN BOSTON

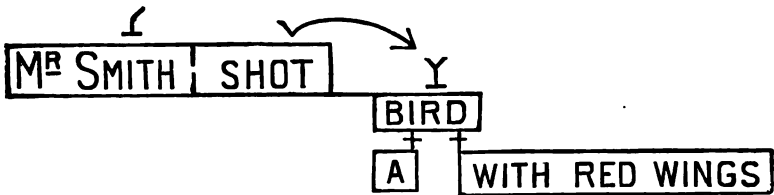
Proceeding to the next step, we would teach the use of *adverbs of degree*.

⊥ ✓ ¯
 CLARA IS ILL
 ⊥
 VERY

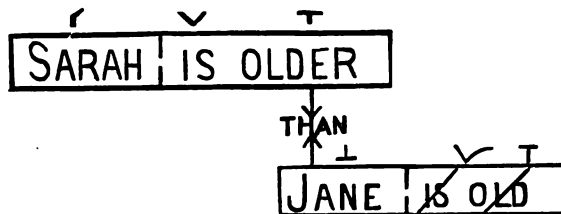
⊥ ✓
 MARY WALKS
 ⊥ HOW?
 SLOWLY
 ⊥
 VERY

Next show that the adjective modifier may be a phrase.

Mr. Smith shot a bird with red wings.

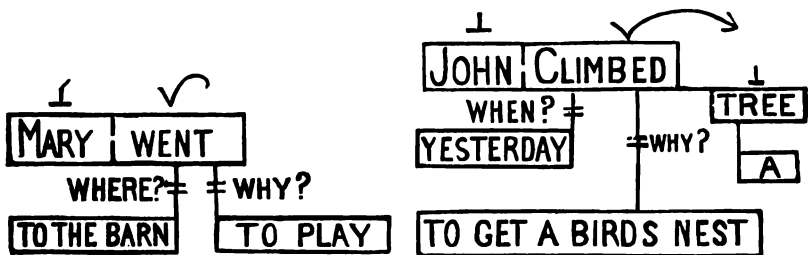


Next teach the comparative degree of adjectives, and illustrate by comparing different qualities, or character and instincts of persons, or things in the room, or well known objects. Let there be no haziness about the idea. Illustrate by the diagram, *e.g.*, *Sarah is older than Jane.*

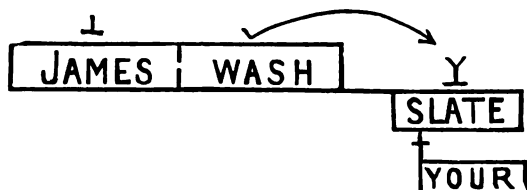


The superlative degree may follow here. Here, too, is the proper place to teach the comparative of adverbs.

We next proceed to teach the *infinitive of purpose*, as an adverbial modifier of *cause*.



Next in order, teach the imperative form of the verb, and illustrate by having the pupils obey directions written by the teacher. *James, wash your slate.*



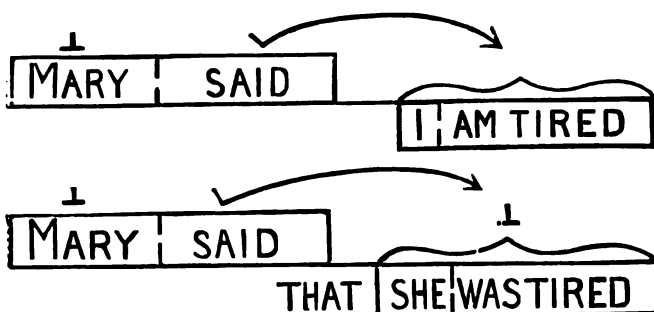
It will furnish good practice to let the pupils give written directions to each other. A little brief authority will be enjoyed.

At this point the direct quotation may be introduced with profit.

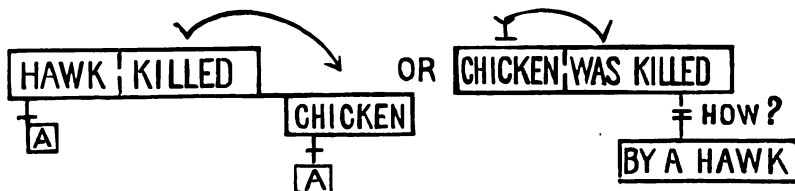
Explain carefully, and illustrate fully, using the pupils to furnish material for living sentences.

The indirect quotation should not be taken up until the direct quotation has been thoroughly fixed by patient practice. Then the forms may be changed from one to the other.

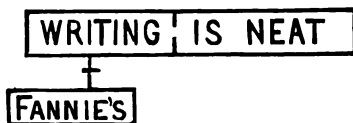
In connection with these quotations, the pupil learns that a whole clause may be the object of a verb.



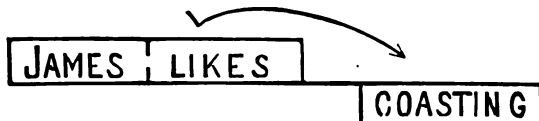
We next take up the passive voice, and show how the object of the active verb becomes the subject of the passive verb. *A hawk killed a chicken*, or *a chicken was killed by a hawk*.



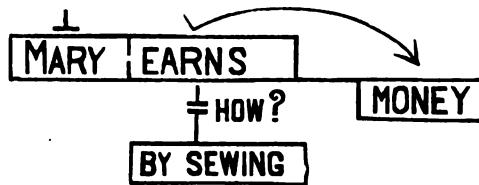
Next, we would teach the use of *verbal nouns* and verbal adjectives, and show that the verbal noun may be used like other nouns as the subject, or object, or in adverbial phrases. *Fannie's writing is neat*.



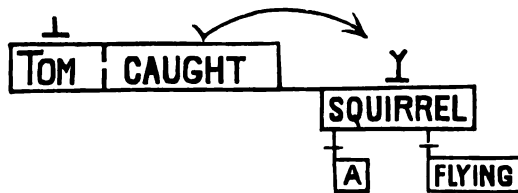
James likes coasting.



Mary earns money by sewing.



Illustrate fully the use of the verbal adjective. *Tom caught a flying squirrel.*

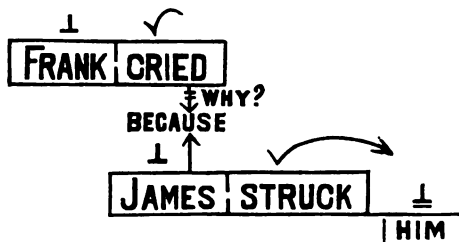


Jane lay in a hammock reading.



Next we would turn to the comparison of adjectives, reviewing the use of the comparative degree, then taking up the superlative degree.

Next show the pupils how to use a *clause* as an *adverbial modifier of cause*.

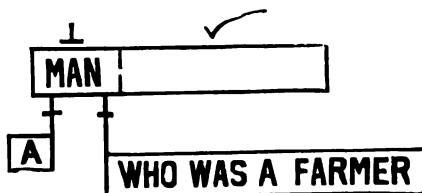


We have now reached a point where the relative pronoun may be taken up carefully, and the class shown that a *clause* may be used as a *modifier of a noun*.

The boy, who sits near the door, is reading.



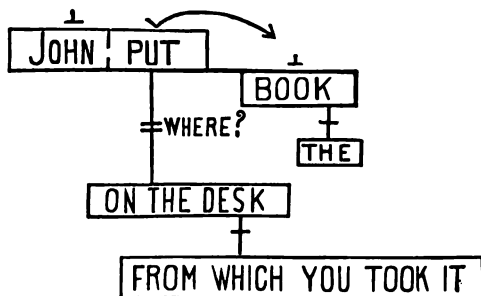
The diagram will be found very useful here in bringing out clearly the deficiency in incomplete sentences, which deaf pupils are so apt to write, when trying to use the relative pronoun, *e. g.* *A man, who was a farmer.*



The pupil sees at once where the fault lies, and knows how to correct it.

The possessive and objective forms of the relative pronoun should now follow in order, but care must be taken to master each step before proceeding to the next, else there will be hopeless confusion. There should be a large amount of practice here, and questions should be used *ad infinitum* almost.

Much of the success of the class, in mastering the relative pronoun, will depend upon the skill of the teacher in bringing out ideas vividly, in the illustrative sentences which she writes. Actions are very valuable aids here. *John, put the book on the desk from which you took it.*



It will take long practice to enable the average pupil to use all the forms of the relative with accuracy and ease, but every pupil will soon learn to understand its full force when met in reading, and the brighter ones will gradually work into its use. Do not urge its use upon those reluctant to use it.

We are now ready to teach the tenses denoting completed action.

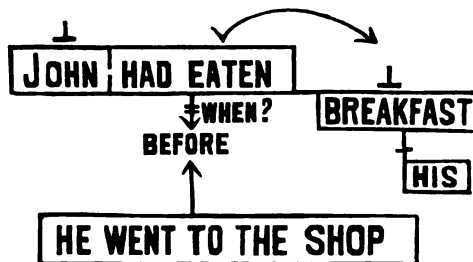
Bring out clearly the fact, that the perfect tense represents an action as finished at some stated past time. Be not sparing of illustrative sentences. *John has written his lesson.*



At noon Mary had finished her work.



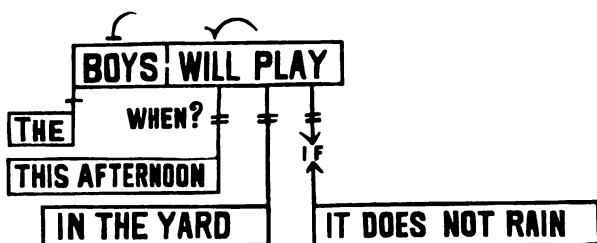
Our next step will be to teach the use of the clause as an adverbial modifier of time. *John had eaten his breakfast before he went to the shop.*



Mary will sew after she has swept the room.



Then should follow conditional adverbial clauses. *The boys will play in the yard this afternoon, if it does not rain.*



As the next step we would teach the use of the infinitive as the subject of a verb. *To strike is wrong.*

An examination of the ground thus gone over will show that we have covered all the essentials of grammatical language. A good foundation has been laid on which to build an elaborate superstructure.

THE CHAIRMAN : A few moments will be allowed for remarks or questions.

MR. CROUTER, of Pennsylvania : I would like to ask one question : At the very outset of your course, I notice that you use very simple forms, and the illustrations, that you gave us, were "*John runs,*" "*James eats cake,*" and, as I understand, you probably have a boy whose name is John, who runs, and you write the action on the slate, and when James eats the cake, you do likewise ?

DR. WILLIAMS : Yes.

MR. CROUTER : Now, how do you explain, by action-work, the difference between "*John runs,*" and "*John is running ?*"

DR. WILLIAMS : I do not explain it at all now. It is the root form of the verb, and is quite enough for all practical purposes. The proof of the pudding is in the eating. We used to use the old form of the past tense, but we now use this, and we find we have practically a great deal less difficulty.

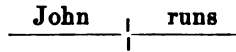
MR. CROUTER : I agree with you that it is necessary to have some distinct form, but will it not lead you into difficulty after a while.

DR. WILLIAMS : Yes, it will ; but we teach them to make the distinction, when we get ready to introduce another tense. When you are talking to your children by signs, you do not indicate tenses, but merely use the root form. Practically there arises no more difficulty from using the word form of the root, than from using the root sign.

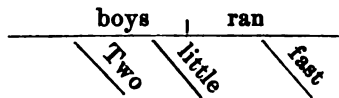
MR. CROUTER : While John is running, we write, "*John is running,*" not "*John runs.*"

DR. WILLIAMS : Yes, but that difficulty is not in the child's mind at all. It is in the teacher's mind, but it is not in the pupil's mind.

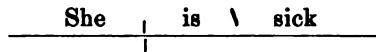
MR. HUBBARD, of Michigan : I find much in Dr. Williams' paper that I heartily approve, but there is one thing I can hardly agree to. I think the diagrams are rather too complicated, and that the same object may be attained in simpler form by means of the diagrams used in "Kellogg's Grammar." In Kellogg's system of diagramming, instead of enclosing the various parts of the sentence in squares or brackets, straight lines are used, thus :



The first part of the line represents the subject ; the last part, the predicate. In case the subject and predicate are modified, the adjective modifiers are represented by diagonal lines from the subject, and adverbial modifiers by similar lines from the predicate, thus :



When an adjective or a noun is used as an attribute complement, a mark slanting toward the subject is placed upon the predicate line, in this way :



If the predicate is a transitive verb followed by an object, the little mark, instead of slanting toward the subject, becomes upright and separates the object from the verb, thus :



Were sufficient time at my disposal, I might go on illustrating the manner in which simple and compound sentences are diagrammed, but such a proceeding would hardly be necessary, since a copy of "Kellogg's Grammar" is easily obtainable. I have found these diagrams a great help, and cheerfully recommend their use to others.

DR. WILLIAMS : The gentleman has entirely mistaken the point of my paper, if he considers it to lie in any particular system of diagrams. The important thing is to secure an orderly development of grammatical principles. I consider diagrams a useful means to that end, but do not insist on any particular set of diagrams. In fact, one could dispense with diagrams entirely and still have the orderly development of principles. With us, it is true that in following out this orderly presentation of language, we do not get one deaf-mutism where we used to get ten.

DR. NOYES, of Minnesota : Allow me to inquire, can you properly get questions and answers into a first year's course?

DR. WILLIAMS : Yes, in the latter half. The second year a great deal. If I had time, I would like to show you a little of the results of questions. I have in my pocket just one single exercise of a class.

DR. NOYES : I would like to add that, for the last three or four years, we have followed, with a few variations in the use of tenses, the course you have marked out ; and we find the same good results that you have. We find that one of the valuable things is the saving of time to the teacher. After they have got a little acquainted with those symbols, the teacher can give his time to other things, and the pupil spends his time in finding out what the mistakes are.

DR. NOYES : I have no hesitation in saying that we have saved a good deal of the time required in the correction of pupils' exercises.

A MEMBER : Can't you explain them to us ?

THE CHAIRMAN : The time has passed, and one paper must necessarily go over. Unless we are too much burdened by papers, this matter can be brought up again.

MR. SWILER : I would like to ask him one question in regard to use of symbols. To what extent do you desire your pupils to use symbols ?

DR. WILLIAMS : We make very little use of them, except to illustrate with. Let the teacher use freely for that purpose, and when that end is accomplished drop them as one would drop a hot potato.

DR. NOYES : I would like to say that any one who desires a copy of "Wing's Symbols," can have one by directing a line to me at Fari-bault, Minn.

THE CHAIRMAN : The hour set apart for the presentation of methods of language teaching, having passed, we shall be obliged to omit, for this morning Prof. J. P. Walker's paper, and pass on to the subject of Arithmetic. Prof. J. H. Eddy will read the first paper.

SOME SUGGESTIONS ON TEACHING THE DENOMINATE NUMBERS AND PERCENTAGE.

By J. H. Eddy, of the Central New York Institution.

DENOMINATE NUMBERS.

There is a notion, held by some teachers, that deaf-mutes have a special aptitude for learning numbers, but my own experience gives me a different opinion. It is true that they have little difficulty in following the merely mechanical processes. These are usually written on the board, so that the eye can readily seize them, and impress them on the memory, which easily reproduces them at will. But in comprehending the value of numbers, and their relations to one another, they have no more knack, if as much, as hearing children. Every step needs to be fully explained and demonstrated in order that they may make sure progress. It is one of the advantages of this branch of knowledge that most of the principles and operations can be illustrated by the use of objects, so that there is no need for even the most

backward not to understand every thing fully. Again, the progress of the pupil in practical arithmetic cannot be faster than his progress in the comprehension of language. The strange terms and constructions, so frequent in practical problems, confuse him and prevent him from seeing the relation of the quantities to one another, so he is at a loss as to what operation to use. All this shows the need of making the various terms, and the nature of the different operations, perfectly familiar before he is obliged to make practical application of them.

Therefore in teaching the tables of weight, measure, capacity, etc., much care needs to be taken, in the first place, that a correct idea of each denomination, and its relative value compared with others of the same tables, is impressed on their minds. To this end, the actual weights and measures should be exhibited, and their values demonstrated. Thus, in teaching Dry Measure, it ought to be shown by practical experiment that two pints make a quart, eight quarts a peck, and four pecks a bushel. Some commodity, as beans, would be convenient to use in such a demonstration. Having got the idea of these measures, it is easy to show them how measures of one denomination are reduced to those of another without affecting the actual quantity. Numerous examples in such reduction should be given them, the measures, meantime, remaining in some conspicuous place, that they may become distinctly and firmly impressed on their memory. But one table at a time should be taught, and at sufficient intervals. In this case, it is often "the more haste the less speed." When treating the weights, the table of Avoirdupois is the only one that there is any use in teaching, especially to an intermediate class. Other tables of weight would only get mixed with this. The working of scales can be easily explained. When one arm of a scale is longer than another, it can be shown how, if the long arm is four times as long as the other, one pound on the long arm will balance four pounds on the short arm. Right here, it would be of great advantage to them to see the comparative bulk of single pounds of the more common articles of food, as butter, sugar, tea, coffee, crackers, cheese, etc. It would be easy to get pound packages of each from the store room of the Institution, or some neighboring grocery; but it would be still better to take the whole class into the grocery, to see with their own eyes all these things and many others, which, up to this time, though often met with in their problems, were to them meaningless terms. If the prices of each article were also made known, a good deal of knowledge of marketing would be imparted. At another time, the meat market might be visited, and the mysteries of the beef and mutton cuts and their prices shown them. In the same way, it would be useful for the girls to know how many yards of cloth would be required for a dress from pieces of different width, and be able to intelligently compare the prices on the same. Any person who remembers his first experiences in marketing and shopping will appreciate the value of such bits of information. The change from the usual schoolroom routine will certainly be grateful to them and induce an increased interest in the study. The table of Square Measure is, usually, to the pupils, a meaningless, easily forgotten jumble of terms. If a square foot were ruled off into square inches, and the pupil required to count the number, he would realize the value of the unit of

the table. And it could be thus demonstrated to him that, as the product of the inches along two sides—viz., 12 times 12—was 144 inches, or the area of the surface, so the product of any length and width gives the area of any surface. This is often not clearly understood by the learners. In the same way, it can be shown how the product of length, width and depth, gives the cubic contents.

If such pains are taken in teaching the tables as above suggested, with the reduction of numbers of one denomination to those of another, in the addition, subtraction, etc., of denominate numbers, the proper processes will only have to be suggested, the pupil will at once see what needs to be done. When he bears in mind that only units of a like denomination can be added together, or one subtracted from another, and likewise, that whenever he has enough units of a lower denomination to make one or more of a higher, they should be thus transformed, all the problems in these numbers will be easily done. The only difference from similar operations in simple numbers is that the process is double, and, in addition to the decimal scale of simple numbers, he has to use one derived from the table of the measures affecting the quantities, in carrying, borrowing, etc. The experienced teacher will expect to repeat much of his work of explanation and illustration before the knowledge is firmly fixed in their heads. In the advanced classes, the boys should be able to find the measures of quantities of vegetables, or grain in bulk, by dividing the net weight of the whole by the weight of a single bushel.

PERCENTAGE.

There is something mysterious to the beginner in percentage, in the strange terms, signs, and novel processes. This needs to be brushed away, by showing him that it is only a continuation or application of decimals. If, as ought to be the case, the pupil is familiar with decimals, there will be little difficulty to them in these exercises. As in decimals, all the operations in percentage can be performed by using the decimal quantities in the form of common fractions: indeed, such exercises would tend to make the pupil more thoroughly understand the subject, and, in many instances, would be preferable done in this manner, on account of simplicity and briefness. The equivalent in rates per cent of the smaller fractions, as halves, thirds, fourths, fifths, etc., should be memorized, so that either form can be used as is more convenient. In the problems of percentage involving the determination of the percentage, the rate, or the base from any two of them, it will help, if it is impressed on them that as the percentage is the product of the other two, and consequently they are its factors, if one factor is given and the other is required, the missing factor is found by dividing the product (percentage) by the given element. It would be a good exercise in this class of problems to make use of the published standing of the base ball clubs in the championship contests. Show how the rates per cent are obtained, and require the pupils to verify them as they are printed from day to day. Thus, if the Bostons have won 49 games and lost 32, they have played 81 in all. The number of games won, divided by the whole number of games, (base) gives the rate per cent, or 60 per cent and a fraction. This

rate is often given in 3 figures, but properly, from its nature, there can be but two figures in a rate *per centum*; if the division is continued beyond the second place, the additional figures are decimal of the rate, and could be better and more accurately expressed in the form of a common fraction. The above operation can then be reversed and the number of games won, or 60 per cent of 81 games obtained, etc. Thus all the problems in percentage proper can be illustrated by the use of these simple sporting quotations. I'll hazard, that they would be interesting to the boys.

A correct solution of all these examples in percentage, and especially where division is used, depends on a mastery of the correct placing of the decimal point.

Interest is of course the most important application of percentage. It may be explained that this term means money paid for the use of another's money, as rent is money paid for the use of another's house, or other property. While the processes of interest properly belong to percentage, they can with little difficulty be done with simple numbers, if the results are correctly pointed off; just as we give our pupils problems in simple numbers which really involve some knowledge of decimals, as in the exercises in which dollars and cents appear.

Thus six per cent interest per annum of \$100, may be stated as six cents paid for the use of every dollar of \$100 for one year, consequently, the whole interest is one hundred times six cents which is six hundred cents or \$6.00. Sometimes, when slow-going pupils are in their last year at school, and it is desirable that they have some knowledge of interest without there being time to go through decimals and the other parts of percentage, it can be taught in this way.

In pursuing the regular course, the method of finding the interest for different periods of time, needs to be worked out at length and fully explained, and then practised sufficiently to become well understood and perfectly familiar to them. This attained, some good, short method of casting interest may as well be taught; for, if they fully understand the process, there is nothing gained by repeating long operations again and again.

It is of great advantage to use the equivalent fractions of a year, of two, three, four, six, eight and nine months, in casting interest, by taking corresponding fractions of a year's interest. The old "six per cent method" is one of the simplest and quickest of the short methods, and is preferable in States where that is the legal rate. Of late some arithmetical authors highly recommend the "cancellation method." In its use the rate of interest is expressed as a common fraction. The interest for years is found simply as the continued product of the principal, rate, and time. When the time is expressed in months, this product is divided by twelve to get the interest, and when the time is in days, the divisor is 360 instead of twelve. To illustrate, suppose we cast the interest of \$400, for three years and six months (or $3\frac{1}{2}$ years) at 8 per cent :

$$\$400 \times \frac{8}{100} \times \frac{7}{2} = \$112 \text{ interest.}$$

Or, for the same principal at the same rate for six months and 15 days, or $6\frac{1}{2}$ months :

$$\$400 \times \frac{4}{8} \times \frac{13}{2} \times \frac{1}{12} = \frac{52}{3} \text{ or } \$17.33$$

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Or, supposing the time were 40 days :

$$\$400 \times \frac{8}{100} \times \frac{40}{360} = \frac{32}{9} = \$3.99 + \text{ or } \$4.00$$

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In these methods where months are assumed, for convenience, to have thirty, and years, three hundred and sixty days respectively, the interest will be greater than it exactly is, and, if the principal were very large, the excess would be considerable. If, in the cancellation method, three hundred and sixty-five were used instead of three hundred and sixty, the interest would be exact. The only inconvenience would be in there being less factors in three hundred and sixty-five available in cancellation ; but if the multiples of three hundred and sixty-five, and seventy-three, its larger factor, were memorized, it would not make much difference, as the final division would thus be made easy and rapid. The absolute accuracy secured would more than make up for the little additional figuring. If these multiples are thus memorized, the process of obtaining exact interest, in the regular way, would be easy ;—that is, when days occur, to always divide the interest for one year by three hundred and sixty-five, and multiply by the number of days, would be very easy. As all monetary institutions use only the exact method of computing interest, why not follow it.

One good, short method, is all the pupils should possess, as if more than one are taught they will be apt to get mixed. It would be well, also, for them to use the printed interest tables. They are used exclusively by the banks and other large business concerns. In their use much time is saved, and errors are avoided which are so apt to creep into long computations by persons unaccustomed to such work. This suggestion applies with more force to compound interest tables.

While engaged with interest, the subjects of promissory notes, and the various terms "endorse," "endorser," "discount," "protest," etc., should be illustrated, as well as the use of checks and drafts. It should be explained how an "accepted" time draft becomes the same as a note. The pupils should be cautioned about putting their names to any kind of paper without any reliable advice, and should be advised to use the printed forms of notes, checks and other legal papers, as when such are written out, opportunity is given for fraud and error.

In order to make the routine of modern business and banking familiar, it has been my practice to illustrate it in the school room. One boy is assumed to be the cashier of a bank, another is teller, another is

a grocer, and still another a farmer. The farmer brings a load of produce to town, and sells it to the grocer, who gives him his check on the bank in payment. The farmer goes to the bank, endorses the check, presents it to the teller and gets the cash. Or the grocer may be short of funds, and gives the farmer a thirty day note. As the farmer wants the money at once, he proceeds to discount the note. His negotiations with the bank officers and endorsement of the paper are exemplified. A blank mortgage form is obtained and filled out with fictitious names and property, and given to the class for examination. In this way a valuable store of knowledge may be given them. If it is objected that they should not know too much about how to run in debt, the answer is that they will need to know how to secure the indebtedness of others to them. These exercises are usually confined to commercial schools, but as our pupils rarely enter them, they must learn them while with us or never.

Little need be said about other less important applications of percentage. It is of no use to teach any other kind of discount than "Bank Discount," as that is invariably used. As to the rules for partial payments; the different rules given in the text books are little observed by business men, and frequently, as in banks, no reduction is allowed on small payments on a principal. It is best to ascertain what methods are used in ones own State and teach them only. The older boys can study taxes with benefit, as it will better acquaint them with their duties as citizens. It is well to know how assessments are made, rates of tax fixed, and how collected. The public officers, however, attend to that, and their figures prevail, no matter how different your own computations may be, though in rare instances errors and overcharges may be detected by a knowledge of this subject. I have nothing to offer regarding commission, insurance, brokerage, and other parts of percentage. Their treatment is simple, and no doubt all use the same methods with them.

THE CHAIRMAN: The next upon our programme is a paper on "Fractions," by Prof. G. W. Cook, of the Michigan Institution.

FRACTIONS.

By G. W. Cook, of the Michigan Institution.

The method I pursue in teaching fractions assumes that the pupil is well-grounded in the four fundamental principles—addition, subtraction, multiplication and division, and in problems embracing combinations of these principles; that he thoroughly understands the office of figures and the art of applying them; that he has been taught and has acquired correct habits of thought and reason in computation; that he regards multiplication as a short process of continued addition, and division as a short process of continued subtraction; and that he has been taught incidentally the value of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc., and is able to find $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{5}$ of certain numbers. Before beginning fractions, a thorough review is made not only for the purpose of refreshing the memory of the pupil, but it also furnishes an excellent opportunity

for the teacher to study the thought and reason of the individual pupil, and is, in short, to see if the class is capable of taking up the study of fractions. The study of fractions is rich in material for mental growth, and provides opportunities for mind development that should be seized and utilized by the teacher. Experience with deaf-mutes has taught me that more should be done to inspire thought, to make more accurate the judgment, and to develop the reason of our pupils; and it was absurd blunders, lack of thought, lack of reason and lack of judgment that prompted an attempt to provide a better way.

The system which we have developed, furnishes abundant material for mental calculation, is especially calculated to exercise the judgment, and is full of exercises intended to strengthen the reason of the pupil; and it is based upon the principle that the "how" should be discovered by the pupil. The system or method that implies the direction "how," by the teacher, without mental action on the part of the pupil, is indeed faulty, for it calls into activity only the memory faculty of the mind and leaves in inactivity the reasoning faculty.

The following of text books, where rules for the solution of problems are laid down, is not calculated to develop independent thought nor to inspire mental activity, and should be discouraged in our schools.

I begin instruction in fractions as follows: I take into my school-room a small basket containing a few apples, potatoes, and such things as can be easily divided into parts. Cutting an apple in two equal parts, and holding one of the parts in plain sight, I ask if this is a perfect apple. I am answered that it is not. Then I ask what it is, and I am told by signs that it is a part of an apple. I then ask if parts have names, and the pupils answer "Yes." What is the name of this part, then? I ask. They reply that it is one-half of an apple. They know that it is one-half, because they were so taught the previous year. I proceed immediately to problems illustrated or acted to be worked mentally.

What I mean by acted problems is to have problems acted in the presence of the whole class, and to have a pupil write the problems from the actions performed.

I give John an apple and tell him to give Mary one half of it. A pupil is sent to the board to write what John does. John gives Mary one half of the apple, and the pupil at the board writes: "John had one apple; he gave Mary one half of it. How many apples had John left?" To deceive the class, John hides the part remaining. The pupils are required to write their answers on their small slates to prevent deception. Nearly every pupil will write: "John has one half of an apple left." But supposing a slow pupil writes: "John has one apple left." The half and whole apple are then compared, and the pupil sees his mistake. But if the pupil is like some I have seen, he will straighten up with all the dignity he possesses, and in the sign-language, with the impressiveness that only the sign-language can convey, he will say: "I do not know." What is more exasperating than a pupil that will not try? After all have correct answers on their slates, the pupil at the board writes: "1 apple — $\frac{1}{2}$ apple — $\frac{1}{2}$ apple. This is an acted problem in subtraction, and is easily solved by the class.

An example in addition is illustrated and acted as follows: John, taking a number of apples and cutting some of them into halves, gives

Mary $\frac{1}{2}$ of an apple, James $1\frac{1}{2}$ apples, and Jane 1 apple. The pupil at the board writes the problem, and asks how many apples he gave away. The solution is easy, and when all have found the answer, the pupil at the board writes: $\frac{1}{2}$ apple + $1\frac{1}{2}$ apples + 1 apple = 3 apples.

After giving a few such examples in addition and subtraction we proceed to multiplication and division, having the problems acted and written as before. In multiplication, here is a problem acted and written: "John gives Mary $\frac{1}{2}$ of an apple 3 times. How many apples did he give Mary?" The pupils are obliged to do it by addition and multiplication, and to write out the solutions as follows: $\frac{1}{2}$ apple + $\frac{1}{2}$ apple + $\frac{1}{2}$ apple = $1\frac{1}{2}$ apples, and $\frac{1}{2}$ apple \times 3 = $1\frac{1}{2}$ apples.

In division, here is a sample of the action problems: "John divided three apples among some of his classmates, giving to each one half of an apple. To how many did he give apples?" While John is doing this, the class close their eyes. The pupils having apples, put them out of sight before the class open their eyes. Let us study into how these pupils do this problem. They do not know the mechanical way. How then can they be expected to solve it? The first slate we pick has this: "He gave $\frac{1}{2}$ an apple to each of 6 pupils." He has the correct answer; how did he get it? I ask him how he did it, and he writes out the following:

$$3 - \frac{1}{2} = 2\frac{1}{2}$$

$$2\frac{1}{2} - \frac{1}{2} = 2$$

$$2 - \frac{1}{2} = 1\frac{1}{2}$$

$$1\frac{1}{2} - \frac{1}{2} = 1$$

$$1 - \frac{1}{2} = \frac{1}{2}$$

$$\frac{1}{2} - \frac{1}{2} = 0$$

He subtracted six times.

Another has this: $\frac{1}{2} \times 6 = 3$. The pupil has learned the year before how to find one half of a number. He knew it must be six. Another has this: $\frac{1}{2}$ of an apple to 1 pupil; 1 apple to 2 pupils; 2 apples to 4 pupils; 3 apples to 6 pupils.

That is good enough reasoning for any body. I have seen pupils who had been nearly through a practical arithmetic, and who could not reason as well as this. He, no doubt, could have worked it by some mechanical method, but he could not reason so well as this boy who could do it only by some round about process of reasoning.

To begin with, problems are acted out in this way, leaving nothing to the imagination; but this will never make mathematicians out of them. It is necessary for pupils to be able to picture the recorded actions on their minds. First, we write out action problems; second, we act out written problems; and lastly, we leave the actions entirely to the imagination of the pupil.

Before taking up fractions, the pupil should be able to trace transactions recorded in problems without action or illustration, and when pupils are as far along as fractions, action should only be used to introduce a new feature of the subject, and after a failure, which is caused by misconception of the problem. Right here let me say that I am not opposed to a limited use of abstract numbers. It may be necessary to prohibit their use in primary grades, but I have never experienced any evil consequences from their use in intermediate grades. I often employ abstract numbers, and write out statements

indicating the operations to be performed. I find that it is a saving of time.

A great many problems are given like the ones already given. As I cannot give the problems in full, I will give statements of a few as follows :

$\frac{1}{2} + \frac{1}{2} = ?$	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = ?$	$1 - \frac{1}{2} = ?$
$3\frac{1}{2} + \frac{1}{2} = ?$	$5\frac{1}{2} + 2\frac{1}{2} = ?$	$5 - 2\frac{1}{2} = ?$
$3 \times \frac{1}{2} = ?$	$4 \div \frac{1}{2} = ?$	$3\frac{1}{2} \div \frac{1}{2} = ?$
$2\frac{1}{2} \times 3 = ?$	$5\frac{1}{2} \times 3 = ?$	$4\frac{1}{2} + 6 + 3\frac{1}{2} = ?$
$1\frac{1}{2} \times 4 = ?$	$7 - 5\frac{1}{2} = ?$	$8 \div \frac{1}{2} = ?$

Sometimes I write statements like these on the board, and have the pupils write problems using the same figures and with the same operation to be performed. I find it is a very good exercise ; and it also furnishes busy work.

It will be noticed that so far we have not fractional terms in both multiplicand and multiplier, and care should be taken to avoid such examples. Also in division, when the dividend is not exactly divisible by the divisor, they are allowed to write the remainder as a remainder. These examples are performed, as it were, by common sense. The work is nearly all done mentally and without the aid of slate or pencil. The work, therefore, must be within their comprehension, and the development steady, proceeding from the known to the unknown. Problems for evening study are copied from the board by the pupils, who are required to bring the answers to the classroom at the next recitation. Sometimes problems are given them to illustrate, that is, each pupil is required to illustrate the problems on his slate. Such problems are absolutely necessary at the beginning, to make thinkers and reasoners of them. It is claimed by some mathematicians, that to comprehend large numbers, we must think of them in their parts. So in fractions, it is necessary that pupils be required to illustrate until they are able to think of numbers in their fractional parts, and until they are able to form pictures of the objects and the transactions on their minds. When pupils are able to do this, then actual illustrating can cease, and not till then.

When pupils understand addition, subtraction, multiplication and division with numbers where halves are used, we proceed to thirds, very much in the same way as we did with halves. Dividing an apple into three equal parts, and holding up one of the parts, I ask its name. I am told one-third, the pupils having learned the name the previous year. We have not learned the meaning of the denominator and the numerator. Now is the time to begin teaching it. When they tell me one-third, I purposely write one half. Now there is confusion, each one trying to show where my mistake is. A slow pupil is chosen to explain the situation. He erases one-half and writes one-third. Why ? I ask. After thinking a minute, he holds up the three parts, draws a line and writes three under it. Does he understand ? Let us see. I throw another third in, draw a line, and write four under it. That is more than he can explain. Another is called up, and halves are fussed with until the philosophy of the numerator and denomina-

tor is partially understood. This is followed up with fourths, fifths, sixths, etc., when they are reached.

When they understand the terms of the fraction, I ask them to name them. They propose some curious names, but after a while, they say that it would be better to use the same names as other people use. I then give them the names, trying at the same time to impress them on their minds.

Examples are then given in addition, subtraction, multiplication and division, for practice in thirds and halves. Here are some with thirds :

$\frac{1}{3} + \frac{1}{3} = ?$	$7 + 3\frac{1}{3} = ?$
$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = ?$	$5 - 4\frac{1}{3} = ?$
$3 \times \frac{1}{3} = ?$	$4\frac{1}{3} \times 2 = ?$
$1 - \frac{2}{3} = ?$	$3\frac{1}{3} \div \frac{1}{3} = ?$
$1\frac{1}{3} + \frac{2}{3} = ?$	$4 \div \frac{2}{3} = ?$

To work problems like these requires thought and mental activity. They are obliged to reason these problems by natural methods, for they do not yet understand the mechanical methods. It is surprising how rapidly the pupils will work these problems. Take, for instance, this problem : $4\frac{1}{3} - 1\frac{2}{3} = ?$ My experience is no doubt not unlike yours. I have seen pupils fail in a problem like this who had been nearly through a practical arithmetic. They failed simply because they had forgotten the mechanical way of doing it. They had always solved such problems by memorizing the mechanical method ; they had never reasoned them out. A pupil who is able to reason out such problems will experience a little difficulty in more advanced work. This exercise is a good one, but should always be given before the mechanical way is discovered.

We now go on to fourths, following the same plan as in halves and thirds. Where in thirds we had only one instance where the fractional part of the minuend was less than the fractional part of the subtrahend, now in fourths we have two such cases. Fifths, sixths, sevenths, eighths, and other fractions of a lower denomination, are treated in the same manner.

Now let's see what we have learned. In the Chicago public schools mental work is all the work given in arithmetic until advanced work is taken up. Here, so far, we have done nothing but mental work, which is in accord with the most advanced ideas of instruction. Too much mental work cannot be given. Problems where the fractional part of the minuend is less than the fractional part of the subtrahend, have always been a stumbling-block to the deaf pupil ; by this method we have overcome a difficulty, at least in my experience I have had no trouble. Pupils have learned to divide when the divisor was less than one, and when the quotient was greater than the dividend. To the mind of the deaf pupil, this seems impossible, but, by the method of subtraction, it is made perfectly plain. The pupil has in a great measure made himself independent of the teacher, for he has ways of working all problems, although they may be crude.

Now begins the real work for the teacher : To present what has already been learned in such a light that the pupil may discover

methods for the solution of still harder problems is, indeed, a task which requires both patience and skill. I give the class a few exercises in counting fractional parts. No doubt some of you may think this work unnecessary; but there is an object in it. First, I begin with halves, and have the pupils count as follows:

$\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, etc.

And with thirds:

$\frac{1}{3}$, $\frac{2}{3}$, 1, $1\frac{1}{3}$, $1\frac{2}{3}$, 2, $2\frac{1}{3}$, $2\frac{2}{3}$, etc.

And with fourths:

$\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{2}{4}$, $1\frac{3}{4}$, etc.

This counting is carried on up to eighths and tenths, until they can count by any mixed number to ten.

We have learned to do mentally simple problems, but we wish to work problems where the figures cannot be carried in the mind; we must discover some mechanical way of solving such problems. First, we will study the reductions. We will reduce whole or mixed numbers to improper fractions. We will now make use of our counting, as:

$\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, etc.

$\frac{1}{3}$, $\frac{2}{3}$, 1, $1\frac{1}{3}$, $1\frac{2}{3}$, etc.

Now, when we get to 1 in counting thirds, I stop him, and ask how he got one. He cuts an apple into three equal parts, and showing me the three equal parts, tells me it makes a perfect apple. I ask him if he can call it by another name; and he answers, Yes, three-thirds. Then I write on the board, 1 equals $\frac{3}{3}$. When he counts 1, $1\frac{1}{3}$, I write $\frac{4}{3}$, etc. I have them write the equivalents like:

$$\frac{3}{3} = 1$$

$$1\frac{1}{3} = \frac{4}{3}$$

$$1\frac{2}{3} = \frac{5}{3}$$

$$2 = \frac{6}{3}$$

$$2\frac{1}{3} = \frac{7}{3}$$

$$2\frac{2}{3} = \frac{8}{3}$$

Also with fourths.

I do not have them tell me how they do them until they discover a quick way; then I have them write on their slates how they did them. They will give the same rule given in books, not always in so good language, but in language that can be understood. Then we reduce improper fractions to whole or mixed numbers. This is done, first, by comparing the counts. We go on as before until a quick way is discovered, and then the rule is written as before. I then divide the fractions into three classes, as:

($\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{3}{4}$)

($\frac{5}{6}$, $\frac{2}{3}$, $\frac{3}{4}$)

($5\frac{2}{3}$, $6\frac{1}{2}$, $7\frac{3}{4}$)

I give them fractions to put in the class where they belong. When they can put any fraction in the right class, I ask them to name the

classes ; but they say they already have names, and ask for them. Then I tell them. They have learned how mixed numbers may be reduced to improper fractions, and to reduce improper fractions to mixed numbers. The reduction of fractions of the higher or lower terms is taught incidentally in this fashion : When we are studying fourths, two-fourths are shown to be the same as one-half, and when we are studying sixths, three-sixths are shown to be the same as one-half. The same with eighths, tenths, sixteenths, etc. At first they know that this is so by comparison, but they soon learn that when the numerator is half of the denominator, the fraction equals one-half ; and when the numerator is one-third of the denominator, the fraction equals one-third, etc. It will be some time before the principle of the change is discovered, but they are able to understand an explanation of it.

Next comes addition of fractions, not having a common denominator. They have learned to add fractions having a common denominator and to reduce fractions to higher or lower terms. To make it very simple, a problem is acted out before the whole class as follows : " John gave Mary $\frac{1}{2}$ an apple, and James $\frac{1}{4}$ an apple, how much did he give away ? " Their pieces are placed together that they may easily see that there are $\frac{3}{4}$ of an apple. I then arrange $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$. I then ask how it is gotten. Some smart pupil will see that when one-half is reduced to fourths, it will make two-fourths. Then I write $\frac{1}{2} = \frac{2}{4}$, and $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$. I write $\frac{1}{2}$ and $\frac{1}{4}$ on the board, and ask if the parts are the same size ; they say not. So I write $\frac{1}{2}$ and $\frac{2}{4}$, and ask if these parts are of the same size ; they say they are. I then ask what we must always do to add fractions when the parts are of unequal sizes ; they say we must change or reduce them. Then on the board is written : " Parts must be reduced to equal sizes in addition and subtraction. " Some little time is spent with addition and subtraction. Then multiplication and division are taken up.

I thus proceed to multiplication. This is the hardest and the most difficult of anything we have yet taken up ; the drill they have had, however, is a great help to them. I then begin with problems like these :—

One-half of four equals ? They say two, and illustrate thus :

○ ○ | ○ ○

Multiplying by one-half is the same as dividing by 2. Here are other examples which I give them to lead them to discover the method.

$\frac{1}{2}$ of 3 = ?

○ (|) ○ = $1\frac{1}{2}$

$\frac{1}{2}$ of 2 = ?

○ | ○ = 1

$\frac{1}{2}$ of 1 = ?

(|) = $\frac{1}{2}$

$\frac{1}{2}$ of $\frac{1}{2}$ = ?

|) = $\frac{1}{4}$ then $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$.

I then arrange one-half times one-half equals one-fourth, and ask, how we get it ? They soon discover that one times one equals one, and two times two equals four. They ask if that is right, but I will not tell them. I say, try others and see if it comes out right ; so they try other examples till they are satisfied that it is the right way. I

then give them : $2\frac{1}{2} \times \frac{1}{2} = ?$ They do it as : $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$, $\frac{1}{2} \times 2 = 1$, then $2\frac{1}{2} \times \frac{1}{2} = 1\frac{1}{4}$. Another way $2\frac{1}{2} = \frac{5}{2}$, $\frac{5}{2} \times \frac{1}{2} = \frac{5}{4} = 1\frac{1}{4}$.

Another $2\frac{1}{2} \times 2\frac{1}{2} = \frac{5}{2} \times \frac{5}{2} = \frac{25}{4} = 6\frac{1}{4}$, or,

$$\begin{array}{r} 2\frac{1}{2} \\ 2\frac{1}{2} \\ \hline 1\frac{1}{4} \\ 1 \\ 4 \\ \hline 6\frac{1}{4} \end{array}$$

I oblige pupils to tell how they do problems—that is, write an explanation of them.

Now we will proceed to division. I give a problem like this : $2\frac{1}{2}$ divided by $\frac{1}{2}$ equals ? They do it by subtraction, and get five for the answer : $2\frac{1}{2}$ divided by $\frac{1}{2}$ equals 5. I then give them another like : 2 divided by $\frac{1}{2}$ equals what ? They subtract, and get four. I keep on giving easy examples like these, until they discover, that to divide by one-half is the same as to multiply by two, and to divide by one-third is the same as to multiply by three. In division I have them work by subtracting until they are able to find their own process. Afterwards, when they come to anything they do not understand, I have them subtract in the same old way, until they work out the proper way for themselves.

I have now given my method of teaching fractions. I claim for it excellence. They are obliged to reason out problems by themselves without aid from the teacher ; they have discovered their own operation ; and while doing this they have formed habits that are of great value to them. This method gives pupils a chance to develop whatever there is in them. Let me say that I do not believe in the use of text books, in teaching arithmetic. I have text books in the school-room, but I use them only for busy-work, and when I fail to prepare problems for evening study. Problems are written on the board for the pupils to copy for evening study. They are obliged to work them during study hour, and bring them in at the next recitation.

We judge a system by its results. Let me say that I have been very successful with this method, and was agreeably surprised daily at the accuracy of the work and at the zeal shown by the class. Out of a class of fourteen, five did not make a mistake for eight weeks in their operation. Some of them did not always reason right, but their mechanical work was absolutely accurate. Some may think the system too intricate for ordinary pupils ; but let me say it is only intricate for the teacher, for the pupils' work is always easy. Again, some may say that only the bright pupils will be able to follow the method described ; if pupils are not prepared for so simple a method as this, it is an injury to the pupils to let them undertake the study of fractions. My class was not a brilliant one, and some of them were quite slow in numbers. One member had never passed on her final examination in arithmetic above fifty ; this year, taught by this

method, she passed one hundred, and her work for the last thirty weeks of the school year warranted such an examination.*

THE CHAIRMAN : The next subject is Articulation, by Prof. Greenberger.

ARTICULATION. (*Continued.*)

By David Greenberger, of the New York Institution for the Improved Instruction of Deaf-Mutes.

In the paper, which I read before the convention yesterday, I tried to explain how breath and voice were produced. To-day I will attempt to show how breath or voice is modified into the various sounds of the alphabet.

The first point in the air-tract, at which the exhaled breath may be modified into an articulate sound, is the glottis. In its ordinary quiescent state, the entire glottis stands wide open, and allows the breath to pass through unhindered. If the front halves of the vocal chords slightly approach each other, so that the opening between them becomes somewhat narrower, and the breath is expelled with some force, the sound of the letter *h* is formed. Deaf-mutes generally imitate this sound readily. If a pupil has any difficulty with this sound, I require him to simply blow on the back of his hand, and then try to repeat the operation with his mouth open, and produce the same sensation on his hand. This mode of developing the *h* sound is derived from a suggestion which Mr. Henry Sweet, the English physiologist, makes in his "Handbook of Phonetics." He says, "Prolong *f* and remove the lips from the teeth, the result will be the simple breath *h*; proceed in the same manner with *v*, and the result will be simple voice (*u* in but.)

In the production of voice, the edges of the vocal chords are approximated, so as to leave but a narrow chink between them, and are set into vibratory motions by the breath. If the mouth is kept open, so as to form an uninterrupted central channel for the issue of the voice, the result will be a vocal sound. But if the breath or voice be interrupted in its outward passage through approximation or contact of the organs, a consonant will be produced.

Let us now consider each of these two classes of sounds, vowels and consonants, separately. I have said that in all vowels the voice issues through the mouth without meeting any obstruction. I will add that the varying shape of the mouth gives the different qualities of vowels. The classification of vowels that was introduced by Prof. A. Melville Bell, is universally acknowledged to be the best in existence. He says in his "Principles of Speech and Vocal Physiology," "The two great agents in vowel modification are the tongue and the lips." He, therefore, divides all the vowels into two classes, *viz.*, lingual and labial.

*Only a portion of the above paper was presented at this session, the hour allotted to the subject of Arithmetic having expired before the reading was completed. For obvious reasons, however, it is here printed in full.—S.E.C.V.

Here is his scale of English vowels :

Lingual.	Labial.
e,	oo,
i (n),	o,
a,	o (re),
e (ll),	aw,
a (n),	u (rge).
a (sk).	
ah.	

The Italian *ah* is one of the extremes of this vowel scale, the other extremes being *e* and *oo*. In the formation of the Italian *ah*, the mouth and throat are opened widely, and the tongue is left in its natural position of rest. If from the position for *ah* the lips are gradually rounded while the voice is continued, we pass successively through all the labial sounds of this scale—the vowel quality is modified from *ah* to *oo*.

If from its position for *ah*, the middle part of the tongue be slowly raised and the lips spread, we pass through all the lingual sounds.

By means of this table, you can locate not only all the English vowels but also any vowel sound that the human voice can produce. If the teacher will bear this table in mind, he will be able to correct any mispronunciation of vowels on the part of his pupils. He only has to put his mouth in the position for the closest vowels (*e—oo*), and from each of these starting points very slowly enlarge the oral aperture till the position of *ah* is reached. In this way he will be able to find the place of the faulty vowel in this scheme.

Now we will proceed to a discussion of the consonants. I have already mentioned, that in the formation of consonants the breath is either partially or wholly obstructed in its passage through the mouth.

The first point at which the breath may be obstructed in its outward passage, and a consonant formed, is the back of the tongue. By contact between the back of the tongue and the palate, the consonants *k*, *g* (hard), and *ng* are formed. The next point, at which an articulation may be formed, is the middle part of the tongue. The sounds produced at this place are *sh*, *zh*, and *y*. The sounds formed by contact or approximation of the fore part of the tongue and the front part of the palate, are *t*, *d*, *n*, *s*, *z*, *r*, *th*, and *l*. By contact of the lips, *p*, *b*, *m*, *f*, *v*, and *w* are produced.

MRS. J. C. BALIS, of Western Pennsylvania: I wish to know if catarrh does not cause many to talk through the nose? Can it not be remedied by medical treatment?

MR. GREENBERGER: Yes, to some extent, if taken in time.

MR. JENKINS, of New Jersey: As I understand, in forcing the voice through the nasal passages, the passage is not sufficiently straight to admit the current, thus producing pure vowel sounds.

MR. GREENBERGER: Yes. Prof. Czermak, of Vienna, has made a very interesting experiment, showing that all the other vowel sounds are formed exclusively by the passage of the vocal current through the mouth, but in the case of the *e*, the current is divided, and part of it passes through the nose.

THE CHAIRMAN : The last paper of the morning's programme will now be presented.

FIRST STEPS IN THE ORAL INSTRUCTION OF THE DEAF.

By Florence C. McDowell, of the Pennsylvania Institution.

The work to be accomplished during the first year of a child's life in an oral school for the deaf is something appalling. It is a work that should never be attempted by one who does not thoroughly realize its importance and far-reaching influence, nor by one who has not had considerable experience as a teacher and shown marked ability and enthusiasm in her chosen profession. The old idea, fortunately now grown obsolete, that any one could teach *young* children, would, I need hardly say, meet with the most disastrous results, if practiced among deaf children just entering upon school work. No part of the entire school course requires greater experience and ingenuity, or a clearer insight into the needs of our pupils than the work of the first year. Pupils during this period must gain, not only an understanding and use of language, simple as it may be, but they must acquire, also, the art of controlling their vocal organs in order to be able to produce artificial speech. To gain the former the sense of sight must be exercised, while to acquire the latter, both sight and feeling must be appealed to.

At the opening of a school year, a teacher is usually given a class of ten pupils. In the first stages, as the instruction has to be entirely individual, much better results might be obtained were it possible to have smaller classes, since of the five hours daily instruction, each of the ten pupils can, of necessity, receive but thirty minutes of the teacher's special care.

Owing to their affliction, the mass of deaf children receive far less home training than their hearing brothers and sisters, and have little or no idea of obedience or self-control. Parents frequently remark that they allow their children to have their own way in everything, under the mistaken idea that they are doing them a kindness, and to some degree compensating them for the loss sustained in being deprived of their hearing. In many ways, therefore, the teacher of deaf children has far more to do than if her pupils heard. It taxes a teacher to the utmost to train, little by little, her pupils into habits of order, and obedience, requiring as it does, the qualifications of teacher, mother and nurse.

We have three distinct classes of deaf children to deal with, each with difficulties peculiarly its own. First:—Children who are congenitally and totally deaf, and with them should be classed those who lose their hearing in babyhood before they learn to speak, thus being, as far as methods of instruction are concerned, practically congenitally deaf. Except in rare cases, deaf children of this class have perfect vocal organs and voices, which they use in crying and laughing, but never having heard they are unable to speak words in the natural way. To this class must be given artificial speech. Second:—The semi-deaf,

or those who have some degree of hearing, varying from so little that they are hardly conscious of it, to a degree sufficient to enable them to learn speech to a greater or less extent. To this class artificial speech must also be given, except in those cases, where the hearing is sufficient for speech to be acquired by means of it, and, however slight the hearing may be, it should be made use of to improve the voice. Third :—The semi-mute, or those who have had hearing and gained speech in the natural way, but have lost hearing from sickness or other causes. The latter class enter school in all stages of mental development and understanding of the use of language. As a general thing, in cases of this character, the loss of hearing involves the partial, or total loss of distinct speech, and, with the lapse of time, unless special attention is paid to it, the quality of the voice changes, and the difficult sounds become less and less distinct. Frequently children of eight or ten years of age enter school, having lost hearing at five or six, who have forgotten most of their language, while that which they still use is almost unintelligible to any one but an articulation teacher, and perhaps those who have been closely associated with them during the time their speech has been growing indistinct and know what they mean to say. Without doubt, a great many children of this class lose natural speech, because those nearest to them do not know how to prevent it, or if they do, they do not exert themselves to do so.

At the outset, in teaching deaf children to speak, it must be borne in mind that voice development and vocal control, with a knowledge of the elementary sounds of our language, constitute most important factors to successful work. A preliminary step towards the accomplishment of this, is to convey to the child's mind the necessity of imitating the movements of the teacher's vocal organs. Usually this idea is readily grasped, but it sometimes taxes all the ingenuity of the teacher to accomplish it. I recall a little girl of six years, who was very timid, and, for some reason, seemed unable to comprehend what was required in this respect. All the usual ways were tried to induce her to imitate the motions of the mouth without the desired result. The child imitated me in other things, such as opening and shutting the hand, standing up, sitting down, and many other simple actions, but could not be induced to open her mouth or give a single sound. I felt sure it was not wilfulness, but because she had failed to catch my purpose. At the time she entered the school, the class was ungraded, and there were no other beginners in it. In a few days, two other children entering, I stood the three in a row, and had the two who had last entered open their mouths, and before she knew it the timid one had achieved the feat also, and from that time on there was no further difficulty in getting her to do what was required. I simply refer to this in illustration of the difficulties that sometimes beset one's work at the very outset, and at the simplest stages. During the first year a great deal of attention must be given to voice development. There are different qualities of voice to be dealt with. Sometimes the voice is too low, sometimes too high, and sometimes nasal. It should be the aim of the teacher to obtain as clear and as even tones as possible, and, to do this, she must constantly guard against the above faults. There is nothing more disagreeable in the speech of a deaf child than an improperly trained voice, one that is first too high and

then too low. By placing one of its hands on the teacher's throat or chest, and the other on its own, a pupil is able, by feeling the vibration produced by the voice, to regulate the height or depth of its own. When the child strikes the proper tone, show approval, and it will soon learn to know, by the feeling produced by its own voice, whether it is of the proper tone. Nasality is a very common fault. When making a first effort to give sounds, pupils often find their tongues very much in the way, and are apt to elevate them in the back part of the mouth, bringing them in contact with the soft palate, and forcing the voice through the nostrils. This error can be overcome by the use of the mirror. When nasality exists in sounds where the lips are in such a position as to make it impossible to see the back of the mouth, the child can feel the vibrations of voice in its nose, while in a clear tone, it will notice its absence.

When the systematic drill of the elements of our speech is commenced, the sounds, *ah*, *oo*, *o*, *ow*, *e*, *a*, *i*, *aw*, *oy*, *u* and *er*, should be taught. Although the Italian sound of *a* (*ah*) is the most open and free flowing of all the sounds, it has been my experience that if taught first, pupils will frequently raise the tongue in the back of the mouth and give a very nasal sound. I have found that the sound of *oo* was more readily taken. After *oo* has been taught, *o* and *ow*, *oo* being the final sound of both, may be easily given. *E* is frequently difficult for a child to learn, but when learned *a* and *i*, which both glide into the sound of *e*, are readily acquired. *Ow*, having been taught, *oy*, or *aw*, and *e* will be taken without any difficulty. It is not advisable to teach all the vowel sounds before giving any consonants. After two or three have been learned, give some of the breath consonants, such as *p*, *f*, and *t*. The advantage of this is, that it will enable combinations to be formed very easily as a preparation for words. For instance, if pupils have learned *oo*, *o*, *ow*, *p*, *f*, and *t*, a number of combinations can be formed with the consonants used as both initial and final sounds. The consonants that are alike in position, and differ only in being voiced or non-voiced should be very carefully taught, so that pupils may thoroughly understand the difference, such as :—

<i>f</i>	and	<i>v</i> ,
<i>k</i>	"	<i>g</i> ,
<i>p</i>	"	<i>b</i> ,
<i>s</i>	"	<i>z</i> ,
<i>t</i>	"	<i>d</i> .

The tendency to exaggerate sounds when given should be carefully guarded against, as it will give trouble when combining, particularly when the sound is final. *D* is one of the sounds which, unless just the right quantity of voice is used, will result in very defective articulation when given at the end of a word. In this way, one by one, with endless repetition and with as many varieties of combinations as possible, should all the sounds be given. *J*—a combination of *d* and *zh*—is perhaps the most difficult, and should be given after the other sounds have been learned. If pupils become familiar with the positions of a teacher's vocal organs in the the production of the sounds, and are taught to speak them before they are taught the written characters, much better results in lip-reading will be obtained, because, if they

find that every time it is difficult for them to see a sound, or combination of sounds, writing is resorted to, they will depend on that rather than make the exertion required for accurate lip-reading. The same plan should be followed when language is given, so that they may become accustomed to reproducing very accurately what they see. A sound or word is not to be considered taught, until the ability to speak it, to recognize it when spoken, and to write it, are fully acquired.

It may seem as though a great deal of time is consumed in drilling pupils on these single sounds and combinations, but results will prove that the time has been well spent; and the speech will be much better than if the word method had been employed. It is comparatively easy to teach words as a whole when all the sounds are simple, but when made up of difficult sounds, the pupil has a severe task to perform, and will fail to pronounce all of the sounds as correctly as he should. In the first two years of my work, the word method was pursued, under the belief that if pupils were taught single elements they would be unable to combine sounds smoothly. I distinctly remember how hard I worked to teach words, and in counting, particularly, what a stumbling block the word six was. The pupils did not say it to my satisfaction, and I knew of no way to make them do so, and was led to suppose that, in some inscrutable manner, time would improve it. There can be no greater mistake than this. Time only fixes more firmly what has been incorrectly learned. Knowing how hard it is to correct defective articulation in hearing persons, it will be readily understood, that great care must be taken in first work to have our pupils as accurate as possible in the production of every sound. Even after these have been correctly learned, great pains must be taken to guard against careless habits of speech. Every articulation teacher knows how many, *many* times a child has to be stopped to make it pronounce carefully. The desire to give new language should never be gratified at the expense of careless speech. If carelessness could be taken out of our pupils, how greatly would the teacher's load be lightened.

This mechanical drilling of the voice in the elementary sounds should be continued for three or four months before connected language is given or attempted. It is not my purpose to go into the details of language teaching, but I desire to give some outline of it in connection with first-year work. In giving language the end to be attained is, that it shall become a part of the pupil's every-day life, not something to be used in the school-room alone or upon state occasions. A careful selection of words must be made, so that they may be put into constant use. The meaning of every word must be made perfectly clear to the child's mind, by frequent use and varied illustration, it matters little by what natural means. If this is not done, a child gets to know certain sentences as a whole, but when a new combination is made, even though using words with which he is familiar, he is slow in grasping the meaning. At the end of a year, a class should have a vocabulary of about five hundred words, be able to use them in naming objects, writing simple actions, and answering or asking the simple questions, which they will require in their daily life, to express their little wants.

There can certainly be no doubt of the vastness of this beginning

work, but when well done, is there any thing that brings with it greater satisfaction than the knowledge that one has been instrumental in developing these heretofore imprisoned minds. The many hours of labor, the infinite patience exercised, and the fatigue of body and mind are amply repaid.

THE CHAIRMAN : The session is adjourned.

TUESDAY AFTERNOON, AUGUST 26.

The Convention was called to order at two o'clock by Dr. Wilkinson, who requested Prof. G. L. Weed, of Philadelphia, to offer prayer.

The reading of the minutes was, upon motion, dispensed with.

THE PRESIDENT : The first paper upon the programme, "The Use of the Sign Language," by Prof. F. D. Clarke, of Arkansas, will now be read.

THE USE OF THE SIGN LANGUAGE.

By F. D. Clarke, of the Arkansas Institution.

Much has been written, and much more said, against the use of signs. To the thinking person it must be plain, either that the great majority of teachers of the deaf in America find in the use of these much-abused gestures a positive, permanent gain ; or that these teachers are a selfish, lazy, easy-going set, who, for their own convenience, continue the use of what has been proved to be a positive disadvantage to their pupils.

I am a firm believer in signs for the average American deaf child in the average American school, and yet, I consider myself neither lazy nor indifferent to the good of the children entrusted to my care. This language, the germ of which was the gift of the great De l'Epee, is a very great help to the deaf during their school life, and its use, while perhaps in some ways hindering the acquirement of English or of speech, aids it in others to so great a degree that I think it would be criminal for our schools to lay it aside, even if that were possible where so many deaf are collected, of which I have great doubts.

It is a remarkable fact that almost all of the determined opponents of signs are those who cannot use them fluently, and who have gained what they know of them, mostly, from seeing an interpreter, in meetings like this, trying to keep pace with a rapid reader ; while many, very many, of those who approve their use, are experts in all the other methods of teaching the deaf. With a skilled principal and a full corps of experienced teachers, the wonderful hardships that the use of signs produce, shrink to such a size that they no longer seem such mountains as they do where from three-fourths to nine-tenths of the teachers imagine that to express a given idea they must use exactly the same number of signs as they would words to express the same idea in

English. A thousand times more harm is done by inexperienced teachers in a single year, than has been done by signs in the last century.

The chief objection to signs is, that the pupils, from their use, are, in some mysterious way, prevented from learning English as fast as they would otherwise. The argument is, that the deaf talk a great deal in signs, and if they had no signs they would talk the same amount in vernacular English. The objectors take the position that all attempts of the children to express themselves must be frowned down ; all the thousand questions that the child will ask during the first few years of its school life must be sternly repressed, until that golden time when it shall have idiomatic English at command for this purpose. Some of the most interesting experiences of my life, as a teacher, have come to me from just such questions, asked and answered in the sign language. One little girl, grasping for the first time the fact that persons and things have names, brought me a book in which her name had been written by loving hands at home, and asked the meaning of the writing. Being told it meant herself, she took her seat, and evidently did some hard thinking, for in a few moments she returned, and asked, in quick succession, if it meant her teacher, any of the other pupils, myself, or the people at home. Her look of astonishment and pleasure when she found that that particular combination of letters meant Emma Branson, and no one else, I will never forget. I need not add that from that time forward she knew her name. Just how this could have been done without the use of signs, I cannot conceive.

Some of the disjointed language that our pupils so often produce, seems to bear a closer likeness to the idiom of signs than to that of English, and it is at once proclaimed, that signs are the cause of it. The writings of many foreigners, who have only a limited knowledge of English, also bear the same likeness, yet they know no signs. I have frequently taken one of these senseless strings of words and asked the author to tell me in signs what it meant, and found the idea expressed in signs was as confused and misty as it had been in words. Not trusting to my own knowledge, I have called on my deaf teachers and found that to them it conveyed no more meaning than to me, for the reason that there was nothing clear to start with.

The "gesture" language has been lately attacked by the head of one of the New York Institutions, in an article called "The Vernacular Method." From reading that article, which I hoped was going to give some light upon the many valuable methods used at Rochester, I have become convinced that the sign language is an entirely different language from what is there described as "gesture"; and that the use we sign-makers of the Combined schools make of signs, is very different from the use the persons known as "gesturers" make of "gesture."

This "gesture" is said to consist of only about four hundred distinct gestures. Our signs, with only a slight effort to enumerate them, easily numbered above two thousand, and I have no doubt that, by making an exhaustive list, four times as many could easily be found.

Neither do we teach signs. Occasionally, an advanced pupil who is to recite a poem, a hymn, or something of that kind, receives a little

instruction in sign-making ; but we might as justly be said to teach the art of acting because our pupils sometimes act plays.

(The great uses of signs are as a stimulus to individual thought ; as a saving of time ; as a means of explanation ; and examination.)

Going into our first year's class, I desire to know, not only if the pupils can write the words and sentences they have learned, but if they understand what they mean. By the use of signs, which these little ones have picked up without effort or instruction, I can in a very short time find out how much they know. I call up a boy and make him run. Most of the class write, "A boy runs." This is action writing, and according to all authorities very commendable. But I wish to find out if the pupils know some other words. I point to a boy, and go through the motions of sewing an imaginary garment with an imaginary needle and thread. They all break out at once with a general negative, and tell me, "A girl sews." I make the sign for a boy, and go through the motions of swimming, and they write, "A boy swims." These two last cases are sign-making and are under the ban. I have injured that class. I confess I am utterly unable to see why or how. I might have sent to the sewing room and brought in a real needle and thread, but I hardly see how we could have had the real swimming.

Again, it is my custom, and the custom of my teachers, to draw out a class, and induce them to write all that they know on some one subject. I have, by a conversation and some encouragement in signs, got quite a little essay on the horse in answer to such questions as : "What does a horse do ?" "What does a horse eat ?" In these, the children gave all the information in an eager, excited way, and the only trouble was to keep what they presented within the bounds of the forms of language that I wished them to use. Of course it is possible to bring horses, oxen, sheep, pigs, etc., before the class, and to bring out the same ideas, but it would be troublesome, and many occasions might arise where it would be next to impossible. My dog followed me into school one day. I made him perform several actions for the pupils to write. "A dog bites a bad man ;" "A dog bites a pretty kitten ;" "A dog chases a pig ;" were a few that it was easy to produce through signs, but which would have been hard to act out, on account of the unwillingness of the man and the kitten to be bitten, and because that particular dog would most probably have been chased by the pig, instead of chasing him. All of these were suggested by the children from their own knowledge of what dogs do, and I cannot see how they could have found language for these, their own ideas, without the use of signs.

The next class that I went into I found engaged in addition, and in answer to a question in signs, one of them gave a very clear explanation of why it is necessary to carry the tens to the next column, though to write this out in language would have taken more time than I had to give to that whole class, even if he had known sufficient language, which he did not, and will not for several years yet.

A pupil in another class, told me in signs how the earth goes round the sun, in a way that convinced me much better than words would have done, that he understood the subject.

It is not necessary to multiply examples of how we use signs to find out quickly what a pupil knows, and to set him thinking ; roughly

speaking, most of the work that the teacher of hearing children does with the voice we do with signs, although we make writing take the place of a part of it. Had we unlimited time, and experienced teachers in much larger numbers than at present, we might be able to dispense entirely with signs in the schoolroom, though I, for one, am far from being convinced that such would be an unmixed benefit. The great cause of the mistakes in language that our pupils fall into, seems to me to be, not signs, but lack of experience on the part of the teacher, and insufficient individual attention, from the constant necessity of making classes much larger than they ought to be. I have noticed that the classes taught by teachers not skilled in the use of signs, are more apt to write "boy a stands," or "boy stand," and similar sentences, than those where the teacher, knowing signs perfectly, is able to appreciate all questions asked, and to answer them so as to be understood.

Thus far, I have tacitly accepted the ground on which the opponents of signs have seen fit to conduct this discussion. They have, without stating it in so many words, argued as if a knowledge of the English language, and the ability to use it with correctness, were the sole, or at least, the most important aims of the education of the deaf; and, as a consequence, that the school which turns out the greatest proportion of such graduates is doing the best work. Far be it from me to belittle the importance of language, or to intimate that other schools are lacking, because they do not follow the system I believe to be best, but I think, from a careful study of this debate, that such an inference is a fair one, and that in these schools it is language, first, last and all the time. Those of our sign-makers who have taken up the discussion, have mostly attempted to show, that the advantages of using signs in teaching language are greater than any disadvantages that may flow from them. Now, I take it that such a view of the object of the education of the deaf is a very one-sided and unworthy one. I hold, that the school which graduates the largest proportion of pupils who become honest, upright, self-supporting, God-fearing men and women, is best doing the work for which it has its existence. Could I be sure that all the boys and girls who enter the doors of the Arkansas School, would go forth such men and women, I would feel that it was indeed doing a grand and noble work; one that the citizens of that State would fully appreciate and sustain; one that every teacher and officer might well be proud of; and one that the Great Master would approve. It is for just such work as this that the sign-language is pre-eminently fitted. Whether it has four hundred words in its vocabulary or a hundred thousand, matters not. Whether it has a grammar, a dictionary, or a written form, is a trifle. Its great worth is, that it is an absolute, living language, enabling one human being to communicate with another without thought of the medium. It puts the teacher and pupil, the principal and the small offender, heart to heart, without an effort on the one side to be simple, or on the other to understand. In it you can command, exhort, beseech, counsel, reprove, denounce, or praise with absolute certainty that you are understood. You can announce to the small boy that such is the law, and it must be obeyed, and reason with the young man, showing him that, though some course of conduct is irksome, it is still necessary. In short, compare the

greatest eloquence ever heard, with a report of the same written out—yes, written in an unfamiliar language—and you see how the sign-language stands to the deaf child as compared with written or spelled English.

I know that its opponents claim that if more time is taken, all this can be done with written, or spelled, or spoken English, but I absolutely deny it. When we wish to make a great and lasting impression, we must have a vehicle of thought so easy and swift that no effort is necessary on either side, and utterance must be reasonably fast. Such a use of English, by the deaf, will come only after years of instruction, and if our teachers would build character, they have no years to waste. Our children come to us with no idea of God, or religion, or duty, and very vague notions of right or wrong, and this abused language enables us in a few weeks to begin a moral education, that to my mind is worth more than all else that we teach them. It enables us to put them in touch with the world, to do something at once, while their natures are still in their formative period, to establish right instincts, and good habits that will last them through life, and to start them on the way to everlasting life while they are yet young.

We are asked to lay this great instrument aside, because a few theorists assert that it interferes with the acquisition of language. At least, let us wait until some one can show us results, in the form of pupils so far superior to what we know ours are, that we can safely think we are gaining, not a little, but a great deal by the change; or, until we can give to all our pupils as many years in school, and as much individual attention, as each can profit by; till that time comes, when, in every school for the deaf, there is a teacher, trained to the work for every grade, whether that grade is represented by one pupil or by twenty; till that time comes, when heads of schools do not grade their pupils according to the number of teachers they have, but number their teachers according to their need for them; and when the conscientious teacher no longer debates the question: "Is it my duty to give this boy more time than I do now, or ought I to give more to the rest of the class and let him fall behind?"

In the meantime, should our pupils write questions that look and sound queer, and which draw a smile from the unthinking, we may comfort ourselves with the reflection, that deafness is truly a great affliction, and that the percentage of criminals and paupers among the graduates of these gesture-cursed schools is smaller than among an equal number of the graduates of any other schools in the world.

THE PRESIDENT: I suppose this paper is the concluding one of a series of papers, some of which were read yesterday, and the discussion which is to follow will pertain to the three papers which have been read.

DR PEET: In connection with this, I would move, that, for some ten minutes, we do ourselves the pleasure of listening to Madame Alberti, of Paris, who is the exponent, in Philadelphia, of the Delsarte system, and she has taken great interest in the application of this system to the language of signs, and adding to it grace, and bringing out the significance of this beautiful method of expressing thought in graceful

attitudes, which are peculiarly the result of this system. I move that we now listen to Madame Alberti.

THE PRESIDENT: You have heard Dr. Peet's motion. All those in favor of it will manifest it by raising the right hand. Those opposed, by the same sign. The motion is unanimously carried. *

THE PRESIDENT: It gives me great pleasure to present to the convention Madame Alberti. [Applause.]

MADAME ALBERTI: In coming here to-day I did not know that I was, to a certain extent, to stand up for signs and gesticulation. I did not know the discussion was going on. In the Delsarte system, we are striving all the time to make our pupils beautiful in the expression of their thoughts through the body—through the organs which God has given us to express those thoughts. I hardly like to express my opinion, but it seems to me that gestures or signs have been particularly given to the deaf-mutes, and that they should attain and use them in the most beautiful manner possible. [Applause.]

There are, according to Delsarte, three modes of expressing mental phenomena by the play of the physical organs:—the voice, which is the animal or vital; articulation, which is the mental; and gesture, the emotive. Gesture is the universal language. It has been given to man to reveal what speech is powerless to reveal. I love or hate. If I say, I love, or, I hate you, how much does that express? But if I say, I love you (with a gesture), how much more does that express! A gesture, like a ray of light, displays all that passes in the soul. Articulate language is weak, because it is successive; it must be enunciated phrase by phrase, while a volume may be revealed by a single gesture. Who can express in words a gesture like that (shrugging the shoulders)?

Francois Delsarte inaugurated the system of the study of man, founded upon the great Law of Correspondence—that is, that the manifestation of thought, sentiment, and vitality, is through our common organic agents, meaning that every state of mind is rendered through an organic form; the outer action reveals the inward state. The co-operation of intellect and will, and nerves and muscles, is made evident in and through bodily action, or, technically and broadly, gesture. To illustrate, a rude gesture indicates a rude feeling, while a refined feeling finds expression in a gentle manner. Delsarte studied each aspect of man, and ascertained the service of each organ, or combination of organic agents, in revealing the being. For the purpose of analysis and synthesis of expression, he conceived man as possessed of life, soul, and mind, and it was with this conception of being that he formulated his æsthetic laws, which we find reasonable and capable of proof in personal development, and capable of demonstration in ourselves, or in Historic Art. To express truly through its organs the good, the true, and beautiful, and all the hopes we possess, the body is the instrument of the soul; we reveal our being through the body; and this system demonstrates the fitness of each organic agent to express ourselves in the most effective and beautiful manner.

The exercises used as the means to secure flexibility, and this demonstration of action in lines of changing curve, which distinguishes the beautiful from the merely strong, differ from ordinary calisthenics.

They strengthen the muscles just as much as the ordinary calisthenic exercises; but the ordinary exercises are in angles, giving development in that way (illustrating), while the Delsartean exercises are all in curves, exercising the muscles for grace, and the muscles which we need for the home and for society. I found, in teaching in the gymnasium last year, that the young ladies who were very strong in some ways, were not strong in the muscles for grace. If I wanted them to sit or rise from the chair gracefully, which they had to do slowly, they could not do it; those muscles were weak.

I will not have time to go on further with the discussion. I will now render the selection, "Nearer, my God, to Thee." I took the signs from a teacher from the West, and the signs differ somewhat from the signs given in the East, but Dr. Peet says they are expressive enough to give to you this afternoon, and they will show the different movements of the body, and the different poses of the body, as I would work them out according to the Delsarte system, not perhaps as good as could be given, but the positions and movements will give you a little idea of what can be done in the art. If any one wishes to ask any questions, I should be pleased to answer.

(Madame Alberti then rendered "Nearer, my God, to Thee.")
[Applause.]

DR. PEET: I would simply say that Madame Alberti has caught the significance of the words, and she renders them in significant gesture, which is the highest kind of sign making—not word sign making, not alphabetical signs, but truly ideographic signs.

THE PRESIDENT: The convention will now proceed to the discussion of these three papers upon the subject of signs, two of which were read yesterday afternoon.

MR. O. HANSON, of Minnesota: The value of the sign-language to the deaf will be conceded by all who are acquainted with it, and who have mingled with the deaf. But, on the other hand, it must be admitted that its indiscriminate use interferes with the acquisition of correct English. There ought to be some way, which, while retaining its benefits, should in some measure avoid its injurious effects; and as such a way, I would suggest that signs be used freely with the youngest pupils to develop their mind, but as their vocabulary increases, the use of signs should be discouraged, and during, say, the last two years of the course, entirely proscribed from the school room, and, as far as possible from their conversation out of school. By concerted action of the teachers, a general impression might be made to prevail that the older pupils should be able to converse by finger spelling exclusively, and that signs should be used only by those who were not sufficiently advanced to converse freely in this way, and when addressing public meetings.

MR. FOX, of New York: I think it will be found that as the deaf children in our schools progress, fewer signs are used in their instruction. The main use of signs in schools using the Combined System is to illustrate points otherwise unintelligible to the pupils. But in public gatherings, signs are absolutely necessary if a deaf audience is to comprehend what is being said. For instance, the interpretations that have been made of this afternoon's discussions have been quite as well

understood by the deaf persons present as the spoken language by those who hear. When a good, clear sign-maker addresses an audience of deaf people, the latter, if perfectly familiar with signs, can frequently write out his remarks word by word. Indeed, when an educated deaf-mute sees beautiful signs, ideas expressed beautifully and well, he understands what is said even better than if he met the same thoughts expressed in written language. And the same may be said of semi-mutes and hearing persons, to whom signs often bring a more vivid conception of an idea than the spoken or written word. It is a mistake to suppose that signs are used in the schools employing them, to the exclusion of spoken and written language. Even deaf teachers prefer spelling by the manual alphabet in all exercises of the classroom and use it as far as possible. But when the subject is beyond the pupil's comprehension, the only safe device that can be employed to advantage is a sign. You all understand that I am deaf. I am a deaf teacher; but I tell you frankly that if, to-day, I could see a better method of teaching the deaf than by the Combined System, which permits signs, when necessary, I would be pleased to see that method adopted. But while I can appreciate the value of speech; can speak and read the lips, and do so at every opportunity, it has innumerable drawbacks. If every man and woman would speak plainly, if they would give proper heed when spoken to by the deaf, if the eyesight of the deaf withstood the continual strain of study and labor, everything might be lovely. But these conditions are very rarely satisfied in daily life. Being deaf and interested in the deaf and knowing the difficulties they have to contend with, I would seek to remove those difficulties, and my experience leads me to believe that signs, judiciously used, are a help and not a hindrance to their acquirement of language, and a source of pleasure and instruction in their gatherings for social, literary, and religious purposes.

MR. KERNEY, of Indiana: During a recent convention of deaf-mutes held in England, some resolutions were prepared. The convention met July 24th, and desired to make a protest against what Lord Granville had said in discussion derogatory to the use of signs. Lord Granville characterized signs as barbarous. I desire to express myself strongly in favor of the Combined System as being able to give greater benefit to the deaf. I think that those in favor of the Combined System will be interested in these resolutions by this association, which has at its head the Rev. Mr. Sleight, with Mr. Charles Gorham as the Secretary.

The following resolution was passed at the British Deaf Congress held at Leeds, on Thursday and Friday, the 24th, and 25th of July. The Committee of the Association desire that the American International Teachers Convention, should take notice of the language used by Earl Granville, a copy of which we append herewith:—

THE BRITISH DEAF AND DUMB ASSOCIATION.

Resolved, That this Congress of the British Deaf and Dumb Association held at Leeds, indignantly protests against the imputation of the Right Hon. Earl Granville, in his recent speech in London, that the finger and sign language was barbarous. We consider such a mode of exchanging our ideas as most natural and

indispensable, and that the Combined System of Education is by far preferable to the so-called Pure Oral. We are confident that the Combined System is absolutely necessary for the welfare of the deaf and dumb.

W. BLOMFIELD SLEIGHT, M.A., *President*.

(Vicar of St. Katharine's, Northampton.)

CHARLES GORHAM, *Hon. Sec'y*.

August 18, 1890.

I have been recently in England, and attended the meeting which passed this resolution.

MR. ELY, of Maryland : As we are to do justice to other members of the convention, we will be obliged to push on to the discussion of other papers. There will be an opportunity later for a further discussion of this subject.

THE PRESIDENT : There seems to be no time allotted for the discussion of these papers, and it is for the convention to determine when such discussion shall cease. Will you put what you have said in the form of a motion ?

DR. BELL, of Washington : I am sure that there are many here who would like to discuss some very important questions that have arisen ; and I do hope that some time will be set aside for discussion.

THE PRESIDENT : This is a very important discussion, and I presume that there are those who would like to be heard on the other side, and the chair does not feel like cutting off debate upon this question, and therefore decides, that the convention shall decide for itself whether this discussion shall proceed now, or whether a definite hour shall be set apart when such discussion shall take place. The question before the house is Mr. Ely's motion, that we proceed with the regular order of business, which is the reading of further papers, the next being Mr. Draper's.

MR. CLARKE, of Arkansas : I would like to ask whether an honorary member of this convention has not the right to make a motion.

DR. PEET : He has a right to make a motion, but not to vote on it.

THE PRESIDENT : I think an honorary member would have the right. I am not sure, but I think that if he is a member worthy of the honor of being added to our number, he should certainly have the right of making a motion ; but whether he would have the right to vote upon it, is another question.

MR. MATHISON, of Belleville : I think I voice the opinion of the assembly when I say we have had too many papers and we have had too little discussion, and that we have read a good deal that has appeared in these papers in past reports.

I, therefore, move that the discussion go on for the next half hour at any rate, and I ask Mr. Ely to withdraw his motion.

MR. ELY : I will compromise with Mr. Mathison, that the discussion continue for fifteen minutes.

MR. MATHISON : No, I stick out for half an hour. I insist on half an hour. I move that we have a half-hour discussion on this matter, and that the time be extended if necessary.

THE PRESIDENT : (to Mr. Ely) Do you accept the amendment ?

MR. ELY : I withdraw my motion.

THE PRESIDENT : And now the motion of Mr. Mathison is that the discussion continue for half an hour.

MR. CROUTER : What is the nature of this discussion ?

THE PRESIDENT : It is upon the three papers which have been read, pertaining to Signs, and incidentally to Articulation ; Articulation will enter into it undoubtedly.

MR. HILL, of West Virginia : I am satisfied that if the greatest good is gotten out of these papers, it must be by discussion. I move to amend the resolution that has been offered here by extending the time to an hour.

THE PRESIDENT : Mr. Mathison's motion comprised that : that, if necessary, the convention could extend the time. His motion was for half an hour, and to extend the time if necessary.

DR. WILLIAMS, of Hartford : I can not exactly see the use of continuing the discussion on Signs. It seems to me that we have come here to see what we can learn out of these various methods of teaching deaf-mutes. Now, those who use signs are agreed that it is a good thing, and if we discuss this from now on to Doom's Day it won't make much difference. There are a great many other subjects upon which we can all agree, and I move that we drop the discussion and go on to other subjects.

THE PRESIDENT : Are you ready for the question : All those in favor of the motion presented by Mr. Mathison, will manifest it by raising the right hand : those opposed, by the same sign. (Carried)

MR. DOBYNS, of Mississippi : I move that the speakers be limited to four minutes. (Carried)

DR. E. M. GALLAUDET : As nobody seems to desire to avail himself of the privilege, I move that we proceed in the regular order. (Motion withdrawn, as Dr. Bell is seen to rise.)

DR. BELL, of Washington : Would it not be well before discussing this subject, to define what you mean by "signs." You have "natural signs"—to which nobody objects—and you have the "conventional signs," which constitute the Sign-language.

We have witnessed this afternoon one of the most beautiful exhibitions of "natural signs" that it has ever been my lot to see ; for it will be observed that the *beauty* of the performance lay in the character of the natural signs employed, and in the mechanism of the gestures, (extended and curvilinear), and not in those signs of which the spoken words were the translation.

When the Delsarte system was introduced into this country, I was one of its first advocates, in the School of Oratory of the Boston University, in conjunction with my friend and colleague, the late Prof. Lewis B. Mouroe, and I heartily recommend it to the notice of teachers of the deaf.

And now in relation to the Sign-language. No one can admire it more than I do. I have studied it, and though I may not know it as well as the sign-teachers here, I admire it as much as they do. I have

advocated its study by men of science, but I do not think it advisable to use it in the education of the deaf. And why? Because it is not the language of the people among whom they live. It is not known to the millions of people among whom they live; and the more they think and talk in a language that is not the language of the people, the more they become foreigners to the people around them.

Some teachers have the idea that this conventional language of signs is a natural language, and their use of it with their pupils reminds me of the experiment of the ingenious Van Helmont, who tried to teach Dutch deaf-mutes Hebrew, instead of their native tongue, because he had the idea that Hebrew was the natural language of mankind—and of Divine origin. I must not, however, extend my remarks upon this subject, as I have only four minutes in which to speak.

Now, in considering the subject of the Education of the Deaf, it seems to me advisable that we should lay down some general principles and bear them constantly in mind. We want some general principles to guide us, by which we can test the value of the different instrumentations that we possess for educating the deaf.

One principle, that is often lost sight of, I am afraid, is this: That the main object of the education of the deaf, is to fit them to live in a world of hearing and speaking people, and that, therefore, your main object should be to teach your pupils to think in the language of the people among whom they are to live, and to use that language as their own. The question of the education of the deaf thus resolves itself into the simple question of language teaching. Given, the English language, and all other things follow, through its agency.

Now, if I send my deaf child to an Institution for the education of the deaf, I want him there to learn the English language. What then have we to do with the Sign-language? Surely, as little as possible. I want my child to learn the English language, and the use of the Sign-language, excepting in those cases where it may be absolutely necessary and best for the attainment of that other end, is *pernicious*.

It hurts; it pulls down; it undoes; it brings forth groans of disappointment and dissatisfaction from the teachers; and after all, we have to undo our work and commence in another way, for the only way by which a language can be thoroughly mastered, is by using it for the communication of thought, *without translation into any other language*. If you want a child to master the English language, you must use the English language in communication with him, without translating into the Sign-language. "Signs," in the broader sense, are necessary, for natural signs belong as much to the English language as to the Sign-language, and are used by all.

But the proper use of signs is to illustrate language, not to take its place. The Sign-language in our schools for the deaf, takes the place of the English Language in the mind of the deaf child, and he then learns English as a foreign tongue.

THE PRESIDENT: I am sorry to interrupt Dr. Bell, but the four minutes allotted by resolution have expired.

DR. PEET: I move that Dr. Bell's time be extended.

THE PRESIDENT: You have heard the motion. All who are in favor

of it will raise the hand. Those contrary minded, by the same sign. It is unanimously carried.

DR. NOYES, of Minnesota : I will very cheerfully give my four minutes to Dr. Bell, if he will occupy the time. (As Dr. Bell declines, Dr. Noyes proceeds.)

DR. NOYES : I have only a few words to say. If I understand Dr. Bell's position in regard to the use of signs, if he was teaching his child geometry, he would object to the use of models or diagrams, in order to illustrate geometry ; but he would simply teach geometry without any of these illustrations, without any of these models, which help the pupils to understand the nature and principles of geometry. This illustration, I think, shows the logic of his position. I have been using signs for thirty years. I do not use signs as a substitute for the English. I use signs as a help to enable me to teach the English language. The house carpenter, when he has built a house, does not let the staging remain about the house, neither do we who are teachers of the deaf desire to have the children, after they have learned the English, to continue the knowledge and practice of signs.

Not long since I met an old graduate of the Pennsylvania Institution, a man who was highly respected. In conversation with him, I made allusion to signs, and he promptly said, "Excuse me ; I have forgotten all about my signs. I only use the English language." He could write and he could speak English, and he did it well, but he said to me, "My knowledge of signs has all gone from me." That is natural. We do not insist upon children, as they grow up, holding on to their knowledge of signs. We simply use it in just the same manner as the teachers of geometry would make use of cones and diagrams, in order to illustrate principles of geometry, and get the idea clearly into the minds of the children. Now, that is my conception of the Sign-language as we use it.

Now, one thing more. I know a good many of our schools, instead of using any signs, just so far as they can, use action, substitute reality just so far as is possible ; but there are times and places where we can not, and there signs are used to bring out the idea.

Now, let the thought be removed from the minds of every one that these institutions are schools designed to teach signs. It is not so. They are used as a means to an end, and not the only means, but one of many.

DR. GALLAUDET, of Washington : Mr. President : My conception of the object and aim of the education of the deaf is an elevated one. It includes the teaching of the deaf how to make a living ; it includes the imparting of a knowledge of the language of the country in which they live ; but more and beyond that, its most important aim is to raise to the highest possible point of development the moral character of each individual. Now, we know that the highest standard of human living is reached by the continued practice of the principles of the Christian religion. Man must love his Maker. Man must live to make others happy. Now, I believe that a man to be capable of living a good life and making others happy must be himself happy. I am, therefore, compelled to ask in considering this question : Will it add to the happiness of the deaf to take the Sign-language away from

them? Is it for their happiness that they should use it? Will it be a help in the education of the deaf to use the Sign-language with discretion? My somewhat extended experience teaches me that scores and hundreds, if not thousands, of deaf children, have been educated in the best sense, including the ability to gain a living, including as good a knowledge of the vernacular of their country and the power to use it as is possessed by a very large proportion of the community; and in many instances the ability to use that language has been carried to a very much higher point. I believe that this is done and more, and that the deaf are lifted to a higher position morally, all through the system of education which makes a judicious use of the sign-language; and still more, I believe that this language is a source of great pleasure and profit and that those who use it are better able to make others happy than those to whom the use of this language is denied.

Mr. President, whatever others may say, I desire to bear my testimony to the value of the Sign-language in the education of the deaf, in the pursuit of *every object* of that education. I believe it is a source of strength and happiness, the removal of which would be not only a wrong and an injustice, but a cruelty to those whom we bear in our hearts and for whose benefit we are giving the strength of our lives.

MR. DOBYNS : I wish to ask Dr. Gallaudet one question : Do you find, that among the students in the college they use signs as much in their intercourse with each other there, as before they came into the college? Do they not use the manual alphabet more than signs when they come into the college as students, to communicate with each other?

DR. GALLAUDET : There are two score of graduates of the college here in the room, and I think they are better able to answer the question than I am. My observation is that they use the Sign-language with freedom when it serves their purpose, and that they use the finger alphabet with precision and freedom when that is to be used.

DR. WILLIAMS : Dr. Bell intimated in his remarks a few moments ago, that our institutions in which signs are used do not teach the English language. This is evidently his deliberate opinion, since he was quoted in the *British Medical Journal* more than a year ago, as saying, in reference to the deaf-mutes of this country, "We teach them a language of their own—so that they know nothing of English." Now, I do not care to argue the point. I will merely refer him to the papers that have been read in this convention by those who have been educated in such schools in this country.

MR. CURRIER : Just in that connection I, too, would like to call attention to what must be considered a complete and thorough refutation of that statement of Dr. Bell's. Yesterday I asked one of our pupils, educated by the Combined System, to make for me translations of the different papers as they were read, in order that I might have them ready for the newspaper reporters. I have two of them with me; one, the reproduction of Dr. Greenberger's lecture on Articulation, translated by Dr. E. A. Fay; the other, a transcript of the paper of Mr. Jones on the Importance of Signs. The other papers were also taken and written out in graceful English, and I should be happy to

devote himself to mastering them, he would be an admirable sign-maker.

I can never forget the first time I saw Dr. Harvey P. Peet make signs, and the lasting impression they made upon my mind. As a proof of this, for although I was but a very indifferent sign-maker at that time, I find no difficulty in imitating, even at this late day, his clear and impressive signs. On this occasion, Dr. Peet called up a pupil, and, putting on the gravest countenance imaginable, told the pupil that he was very sorry, but some pupils had reported to him that he had yielded to the temptation to drink and had become intoxicated in the city the previous Saturday. The pupil denied it, and declared that the pupils in question had lied to him. Dr. Peet paid no attention to his protests, but told him to be quiet, and then putting on that terrible countenance, which only Dr. Peet knew how to assume, proceeded to exact from the pupil a promise not to repeat the offence. The pupil retired with profuse promises, little dreaming that by making the promises, he had unconsciously betrayed himself.

THE PRESIDENT : The time for this discussion, as limited by the convention, has now expired. Next in order is the presentation of a paper by Mr. Tillinghast, of North Carolina. Will Dr. Peet please take the chair for a few moments ?

[Dr. Peet having taken the chair recognized Mr. Tillinghast, who, according to the programme, was to present a paper. That gentleman, however, instead of reading his paper, surprised both the presiding officer and the Convention, by requesting Mrs. Weston Jenkins and Miss Gertrude Walter to come forward to places upon the platform, and by then turning to the chair with the following address.]

MR. TILLINGHAST : In loving file we come to do honor to the old instructor of our youth, the champion of the system of instruction to which we owe all we are, which has survived every vicissitude, and which in yourself embodied stands. The profession is dotted with your pupils. Your living soul stimulates the air of many a school room, and it is our proud privilege to work under the glow of your transmitted touch.

As there is nothing so dear to us as your own personality, we think our most fitting gift would be a portion of that personality caught and imprisoned on canvas by the skill and genius of one of your own pupils :

"The great Italian poet, when he made
His dreadful journey to the realms of shade,
Met there the old instructor of his youth,
And cried in tones of pity and of ruth :
'O, never from the memory of my heart
Your dear, paternal image shall depart ;
How grateful am I for that patient care
All my life long my language shall declare.'
'To-day we make the poet's words our own,
And utter them in plaintive undertone ;
But, to the living only be they said."

[At the conclusion of this address, the two ladies pulled aside a curtain, displaying to the astonished audience a fine life-size painting of Dr. Peet handsomely framed. (Prolonged Applause.) Taken completely by surprise, the Doctor was for an instant unprepared for a response, but recovering himself replied as follows :]

hand them to any one who may desire to inspect them. Those of you who have been called upon to translate from signs into spoken language will appreciate them, especially when the difficulty of listening with the eye and transcribing with the hand at one and the same time is taken into account.

MR. MOSES, of Tennessee: I think we have had this afternoon, in the words of Prof. Bell, whose opinion we all respect, and in the address and beautiful signs of Madame Alberti, one of the highest tributes to the Sign-language as used in American schools that I have ever known. That lady's rendering of "Nearer, My God, to Thee," was as plain to every person in this house, whether he could hear or speak, or not; was as uplifting as it is possible for the most eloquent words ever spoken to be. Having caught her idea of the Sign-language from the schools, those signs had the added grace of a cultivated lady's rendition. Dr. Bell says, "There are signs and signs." So there are ends and ends. I do not imagine that we teach the deaf in this country, simply that they may acquire the English language. I think the idea of Mr. Clark ought to be emphasized in this discussion, that there are other things, besides the English language, to be learned, and that there are other ends than the acquisition of language. How many of the great men of America do we judge by their knowledge of the English language? We do not, even in the halls of Congress, judge a man by his fluency of speech or the ability with which he writes; we judge him by his thoughts, his acts, and his control of men; and those who witnessed the exhibition here this afternoon, know that human hearts can be stirred by such exhibitions as that, by the use of such language as that, when a cold word, perhaps, or a mechanical use of the fingers, could not do it. In the moral and intellectual development of the deaf, I believe there is not a teacher present who has not seen the benefits of the use of signs, and I, for one, am not willing to give them up.

MR. A. JOHNSON, of Malone, N. Y.: When a pupil first enters school, he is not familiar with our arbitrary signs. He does not understand them any more than he does written language. He has a few crude natural signs, which have served him for all practical purposes. We make use of these signs, at the beginning, to reach his understanding. Without any exertion on the part of the teacher, and without the slightest effort on the part of the pupil, he adopts our signs. We, however, spend no time in teaching him signs, but we make use of signs to explain the meaning of words, phrases and sentences. Of course, we make use of every instrument at our disposal to teach him language, such as describing actions, writing from signs, etc., but in our daily work in the classroom, we are not teaching signs any more than the pure-oralist. The signs which Madame Alberti employed to translate a hymn this afternoon, were not precisely like the signs we use in our classroom, but were designed to show the grace of motion, and as such they were perfectly understood. Dr. Bell will please excuse a personal allusion, but I will here say that he is endowed by nature with all the requisites for a splendid sign-maker, a commanding physique, expressive features, and a graceful, energetic manner. It is a great pity that he is opposed to the use of signs, for if he would

devote himself to mastering them, he would be an admirable sign-maker.

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Occupations of Graduates.

Unascertained at this writing (of whom one died soon after graduating) ..	4
Foreman of a daily newspaper.....	1
First assistant postmaster of a city, and editorial writer.....	1
Clerk to a recorder of deeds.....	1
Official botanist of a State	1
Deputy recorder of deeds in a leading city.....	1
Teachers	34
Teacher, and principal of a leading institution.....	1
Teachers, and founders of schools.....	5
Teacher, founder of a school, and principal of an institution	1
Teacher, principal of a leading institution, authority in microscopy, merchant in iron and steel.....	1
Teachers, and editors of papers for the deaf.....	4
Assistant professors in the college.....	3
United States examiner of patents, and attorney in patent law.....	1
Clerks in United States departments, and teachers.....	4
Clerk to the Librarian of Congress, and teacher.....	1
Clerks in the United States departments, custom houses, and post-offices..	8
Editors and publishers of county newspapers, and general printers.....	3
Bank clerk.....	1
Farmers and teachers.....	3
Ranchman.....	1
Teacher, and fruit-grower.....	1
Insurance clerks	1
Expert in the finishing of lenses.....	1
Publisher of a paper for the Methodist Publication Society.....	1
Teachers and missionaries among the deaf.....	3
Architect's draughtsman.....	1
Architect.....	1
Practical chemists	2
Partner in wholesale milling and flouring business.....	1
Total	89

It is noticeable that quite two-thirds of the graduates have at some time been engaged as teachers. This is not to be wondered at. They can not hear, indeed, and some can not speak ; but, while in zeal, intelligence, character, and discipline they are the equals of other educated young men, they have also what the brand new hearing teacher has not—the key to the minds and hearts of their pupils. They will not be apt to make chips of their timber, spoiling several generations in learning how to teach one. In addition to these qualifications, not a few have had actual experience in teaching.

Now, principals everywhere are on the watch for just such persons for teachers. Some years ago the late Edward C. Stone addressed the students one morning at chapel, and, alluding to Bird, who also has passed over into the silent land, he said, "I have one of your alumni in my institution. He is a good teacher—gentle, zealous, and pains-taking. I want more like him. If any of you are like him, I want you."

Judging by the record, Mr. Stone spoke for the body of principals, since there is hardly a school in the United States employing deaf teachers at all that has not employed one or more graduates of the college. Forty graduates have held their positions as teachers continuously from the time of their appointment, covering periods ranging from one year to twenty-four years. Many institutions have had two, and a few have had three graduates teaching at once. Fifty-eight graduates have taught in forty different schools and institutions.

The college has, in fact, served as a sort of exchange in the matter of deaf teachers. Formerly it was by chance that a good deaf teacher bred in one State entered on work in another. But by the agency of the college this is no longer true. Deaf teachers are not now limited in their choice of a field; and a principal in one State searching for a deaf teacher can practically look over all the other States before choosing. Among scores of examples, a graduate from Iowa is teaching in Pennsylvania, and one from Pennsylvania (born on the field of Gettysburg) has taught for nearly twenty years in the heart of Mississippi.

All these statements are made, not for the purpose of advising or defending the employment of deaf teachers, nor to imply that the highest usefulness of the college consists in producing them, but to show that the fact that so large a proportion of the graduates engage in teaching is not a matter for wonderment or criticism, but under present conditions must be regarded as natural, if not inevitable. A lessening of the demand or a changing of the college curriculum in the direction suggested by the writer at Paris, and very ably discussed as to colleges generally by Professor Shaler in the current number of the *Atlantic Monthly*, are probably the only means by which this drift will be influenced.

It will be observed that several graduates have been founders of schools, some of which have or will become permanent institutions. Besides two partial-course men, six graduates have done this.

Some people do not approve of small schools, but the common sense view is that wherever children are growing up in ignorance a school begun among them is a harbinger of all good, and the man that begins it is a benefactor.

We rightly offer all imaginable honors to the Gallaudets and De Haernes who, in the plenitude of their powers, established schools for the deaf at their own homes and among their own kindred. And will the future give no laurel leaf to the McGregors and the Simpsons who, bereft of hearing and lame of speech, have each done the same thing among hundreds of thousands of strangers? Have we not one bough of bay for the Larsons and the Whites who, shorn of both hearing and speech, have repeated the deed upon two confines of civilization? And shall no just and generous tongue or pen record a word of praise for Kerney, who, disgusted at seeing his parent school made the spoil and sport of politicians, deliberately resigned an easy and well-paid place under the Government, went back to his native State, and there, deaf and dumb, and alone, has built up a thriving school that promises to rank with the best in the land?

The writer knows not how it may seem to others, but to him, knowing so well the incredulity, the indifference, the coldness, as well as the

positive opposition that these young men encountered, their triumphs under such heavy handicaps seem as pathetic, as significant, and as worthy of untinted praise as any that can be found in the field of labor for the deaf.

A glance at the occupation of the graduates tells much, but also leaves much untold. For instance, among the specialists, the botanist has correspondents in several countries in Europe who have repeatedly purchased his collections; he has written papers upon seed tests and related subjects which have been published and circulated by the Agricultural Department.

The microscopist was a founder and is a recognized leader in one of the foremost microscopical societies in the country; he was for several years principal of a leading institution, and then compiled the *Rain-drop*, perhaps the best publication extant for young deaf children, and he is still at work on future volumes of it; upon ceasing to be principal he declined to stay in the same institution as teacher, though urged to do so, and struck out into a new field: after years of effort he has, with no partners, built up a successful business as a merchant in iron and steel.

The attorney has been admitted to the United States Supreme Court, and is reputed to command an income of \$15,000 per year.

One of the editors and publishers has a silent partner, but he alone created and sustains the reputation of his paper, besides managing all the details of a large printing business; Senators and Representatives in Congress have testified that the paper is an elevating influence even in the center of cultured Massachusetts where it is published, and its editorials are frequently copied by metropolitan papers.

The architect, scarcely yet four years graduated, has already won credit, but, content with no ordinary rank, has left an excellent position to perfect himself by study in Europe.

One of the chemists has been employed for years by corporations in the two chief cities of the West, and his contributions to scientific journals here have been reprinted in those of foreign countries.

Other like cases might be cited; but perhaps some one will say, Oh, these teachers and writers and specialists were bright young men—they would have arisen any way, and it is not fair to call their careers results of college work. But, ladies and gentlemen, that is a statement which will not bear examination. No doubt the plow-horse that became a famous trotter had it in him all the time; but he would have been a plow-horse till he went to the horses' heaven if he had remained at the plow. It needed sharp discipline and many a "brush" with tried and stanch competitors before he reached that flight of speed which covers 35 feet in a second and a mile in 2.30.

So with young men. Generation after generation of graduates has come and gone, and of some among them it must be said that they came as generations of unlicked cubs. Could this be otherwise, coming as they did from small schools and remote institutions, from the restraint and dependence of institution life, in which also perhaps they had not a rival to test their mettle and rouse their energies? And think not that they will censure the writer for saying it; no graduate can be found who will not be swift to assert that the college performed an indispensable part in making him the man he is.

It may not be said that the college studies did it, though they be valuable ; nor yet the influence of the faculty, though that be pure and ennobling ; a more efficient cause works with these, and it is the incessant action and reaction of the students upon each other. There is a continual, though not always conscious, pitting of brain against brain and brawn against brawn. It is a little world, and, as in the great world,

Its losses and crosses be lessons right severe,
But there's wit there ye'll get there ye'll find no other where.

In such a life whatever is good and strong in a youth is sure to come out and grow better and stronger ; whatever is weak or mean is equally sure to be discovered and soundly snubbed, if not cured. "No logic would convince me," exclaims George Wing, alluding to relations with the more intelligent of his school-fellows, "that my association with these young men was not of greater benefit to me as a factor in whatever education I have acquired than the sum of all other influences subsequent to the loss of my hearing."

This is the antithesis of the "ideal-school-with-one-pupil" theory. That one pupil may give promise of conquering the world as long as the world is a school of one pupil and he is that pupil ; but when he enters the real world he will have need of powers already disciplined by hardy conflict. Every college or advanced school is a forum and a field where, as Wellington said of Eaton, the Waterloos of life are won in advance ; and then when a capable youth is sedulously kept from its wholesome struggles, and trained as it were in a closet, all manly spirits will feel that he is robbed of a chance to increase his store of light and power.

There is time to speak of only one among many indirect results of college work. Scores of the deaf now in our schools, and hundreds once therein, have received something of the benefits of the college, although they never gazed upon its walls or campus. It is not on the shining, peopled beach alone that the power of the life is felt :

For when the tired wave, idly breaking,
Seems there no tedious inch to gain,
Far back, through creek and inlet making,
Comes, silent, flooding in, the main,

Many pupils have been incited to salutary effort by the idea of entering college, even if they did not enter. Many among the deaf at large have had the dull waters of daily life stirred and sweetened by intercourse with students or graduates of the college. Lately the writer had the happiness to visit one of our largest cities, on whose border is an institution admirably equipped and managed. In that city he found one graduate in the iron and steel merchant already mentioned ; a second in an assistant to a famous astronomer ; two others, teachers in the institution ; a fifth, entirely as well fitted to teach, but doing such good work as supervisor that the directors feared a change ; and four partial-course men, artisans, but known as industrious and respectable men.

Now it is not supposable that the effect of college life and training ended with assisting these graduates to their several positions of honor and influence. Many of them are prominent, nay, foremost in every

good word and work among the deaf. Should any one say, That may be true, but these associations of the adult deaf, even the local ones, are to be deprecated, the reply is, These associations are inevitable—they are just as natural and certain as was the association between Adam and Eve. Should the critic retort that evil came of that most ancient of associations, it is replied, So there did, lots of it, and we must labor to counteract it in the best ways we can. And so of these associations. They spring from the same unchangeable principles of human nature; they are here; they are facts; and it is a mere flapping in the air to cavil at their existence or dream of their eradication. We must accept them, put all the good we can into them, or surrender the field.

The uplifting influence of the graduates in the city alluded to is a type of that exerted by them in all parts of our country. After the return of the Americans from the Congress at Paris last fall, one of our oldest and ablest deaf teachers, who, however, is not a graduate of the college, said to the writer, "That was an able delegation. Its average both of character and ability was high. It was, too, unique. Twenty years ago it would not have been possible to gather such a delegation. We owe it to the college. I can see that the effect of its labors has been everywhere to raise the general average of intelligence and capacity among the deaf."

Intimately acquainted with every graduate of the college, viewing these outlines of their history, and remembering a thousand details that cannot be here alluded to, the writer feels that the fruits of the first quarter of a century of college work are cause for warm congratulation among the friends of the deaf. But this paper is not written mainly for congratulatory purposes. It looks to the future.

No claim is made that the college is perfect, but only that what can be done to render it so will be done. To improve the college, however, is a hopeless task, unless it receives the sympathy and support of the schools generally. They should be correlatives. With some this sympathy and correlation already exist. Leading institutions in the Middle and Western States have brought their courses of study into consonance with those required for admission to the college. That the best pupils reach such a standard will be to their advantage, even if they do not seek entrance to the college, since it includes all the requisites of a good common school education.

The institutions working in unison with the college will not be slow to testify that they have received a reward in the return to themselves or to society of young men as well equipped for good service as the infirmity of deafness will permit, and many of those institutions which have not yet sought this unison have already given such testimony, for they have been eager to avail themselves of the services of the graduates.

When all is said, it comes to this: the college would be glad of more good material, but it seeks quality rather than quantity. If, then, you have a young man in your school endowed with talent and possessed of a good character, when you have done all for him that the means at your disposal will allow, send him to the college. If the college does not send him forth with a sounder body, a quickened purpose, and an enlarged capacity, it will not be from lack of sincere and

strenuous endeavor by those on whom the responsibility of the college directly rests.

MR. CLARKE, of Arkansas : I wish to interrupt the proceedings for a single moment. We were all very much interested in the presentation of this picture in honor of the Principal of the Institution by some of its old pupils, and, for my own part, I think I voice the wishes of a great part of this assembly when I say that, I should be very glad if we could interrupt our proceedings long enough to appoint a committee of two to conduct the artist that painted that picture to the platform and introduce him to this assemblage, and I move that the chair appoint a committee.

THE PRESIDENT : You have heard the motion, that the chair appoint a committee of two to conduct the artist to the platform. All who favor the motion will manifest it by the usual sign ; all opposed, by the same sign. The motion is carried.

THE PRESIDENT : I will appoint Mr. Clarke, of Arkansas, and Mr. Jones, of New York.

[Mr. Ballin was then escorted to the platform.]

MR. CLARKE : I have the pleasure of introducing to this audience Mr. Albert Ballin the artist who painted the picture.

MR. ALBERT BALLIN : Ladies and gentlemen, I am not a man of words. I am a painter, and as I stand here before you, I am abashed in your presence. It is the proudest day of my life, and I am happy to present my work before you.

DR. E. M. GALLAUDET : The Special Committee for the consideration of certain modifications of the methods of the convention, is prepared to report, if the regular order of business may be suspended.

THE PRESIDENT : The chair does not feel authorized to suspend the regular order. There are yet several papers to be presented.

MR. S. T. WALKER, of Kansas : I move that the regular order be suspended, and that the report of the Special Committee for the consideration of certain modifications of the methods of the convention, now be heard.

THE PRESIDENT : You have heard the motion. All in favor will raise the right hand ; all opposed, the same sign. The motion is carried. The Report of the Special Committee is now in order.

DR. E. M. GALLAUDET : Mr. President:—The Committee, consisting of Dr. E. M. Gallaudet, Dr. P. G. Gillett, Dr. G. O. Fay, J. W. Swiler, A. L. E. Crouter, F. D. Clarke, Dr. Job Williams, S. T. Walker and Miss E. L. Barton, appointed yesterday to consider the possibility of effecting some changes in the matter of holding our conventions, the time, etc., and the manner of organization, authorizes and directs me to present the following resolution, adopted by the Committee at the meeting held this noon :

“Resolved, That the Chairman of this Committee be instructed to report to the Convention that the Committee has held three meetings, and has considered, so far as time would permit, the subjects referred to it by the Convention. The Committee find, upon consultation, that the questions and interests at issue are so diverse and important that

it is impracticable at this time to report a plan of re-organization of the Convention, and recommend that the subject be referred to a committee to report to the next Convention any desirable modifications in the working policy of our plan of organization. The Committee are of the opinion that there is a demand in the profession for a more frequent meeting of the members thereof, and would recommend to the Convention to instruct the Executive Committee to provide for a meeting of this Convention during the time of the World's Fair, at such place as the Committee may find most for the advantage of the members of the profession."

DR. NOYES : I move that the resolution be received and adopted.

MR. WESTERVELT, of Rochester : It is customary for educational associations like this, during the session of the Convention, to make arrangements for their next gathering by the appointing of a President, who shall fill the office in the interim, and arrange all details for the management of the Convention over which he will preside.

That we may consider the advisability of the adoption of this custom for the management of our next Convention, there is offered the following amendment :

"*Resolved*, That this Convention, as an association of teachers of the deaf, elect a President of the Convention to be held in Chicago, in 1893, and empower him to appoint a Committee of four or more representatives of the different centers of the country, who will, with him, make arrangements for the organization of the Convention, the entertainment of members, and all other necessary details of its management.

"For such President, I would nominate a teacher, who, through years of labor, has shown his devotion to the cause of deaf-mute education, and who, by his administration of the very profitable Convention which was held at the Ohio Institution, of which he was Superintendent, and by his management of the affairs of this and previous Conventions as Chairman of the Business Committee, has shown his conspicuous fitness for this position ;—I would nominate our esteemed and honored associate, Dr. Gilbert O. Fay as President of the next Convention."

THE PRESIDENT : Is this offered as an amendment to the motion that the report of the Committee be received and adopted?

MR. WESTERVELT : It is an amendment to the motion of Dr. Noyes to adopt the report of the Committee, which is thus opened for our consideration.

DR. GALLAUDET : As chairman of the Committee, I beg to submit that an amendment to a report of a Committee is hardly in order.

THE PRESIDENT : It is not in order, unless the motion part is withdrawn. I do not suppose that the chairman of this Committee will take the responsibility of accepting that amendment.

MR. WESTERVELT : I will offer it as a substitute.

DR. GALLAUDET : Mr. President, I should urge, with all respect to the convention, that the report of the Committee is presented, and that no amendment to that report can, by any possibility, be made by the convention under parliamentary practice. If there are

measures that are to be proposed, such as those of Prof. Westervelt, they would be in order after the convention has disposed of the report; but we had not the honor of Mr. Westervelt's presence as a member of the Committee; and I cannot see how he can arrange to change the report of the Committee. The report of the Committee is complete. It is presented to the convention for their decision.

THE PRESIDENT: The chairman rules that the motion of Mr. Westervelt is out of order.

MR. ELY: The motion is in two parts: accepting the report of the Committee passes judgment on their action, and discharges the Committee. The question of adoption is a separate matter, and will bring up the subject of whether we will adopt or modify the plans proposed in the report. Then the motion of Mr. Westervelt will be in order.

THE PRESIDENT: The motion before the house is to receive and adopt.

MR. CROUTER: I move that the motion of Mr. Noyes be amended by striking out the word "adopted," making it read, that the report of the Committee be "received."

DR. NOYES: I accept the amendment.

THE PRESIDENT: Now, it recurs on the motion to receive the report of this Special Committee. All those in favor of the motion will signify it by the usual sign; those opposed, by the same sign. Motion carried.

DR. NOYES: I hold in my hand a motion which I beg leave to offer. It has been in my mind for the last two days as a leading thought, and now the question is what plans shall be offered and adopted by this convention, which will most advance the objects that we all have in view in meeting together on such occasions as this?

THE PRESIDENT: Mr. Noyes, excuse me, I would say you are not in order.

DR. NOYES: This is connected with that report. I do not go into it at great length, but the thought in my mind has been this; if we can make some pre-arrangement before the time that these conventions assemble, such an arrangement as will secure to us the presentation and development of the important subjects that should come up, it would be a great gain. Select persons, who are well posted in the work, and by pre-arrangement with leading individuals in the profession have them open the discussion, that we may thereby draw out more points of special topic and interest to all in the profession. That would bring before us the leading thoughts and the leading movements in the profession. To illustrate: suppose our subject was "Industrial Education," and there was appointed a committee, who should have the charge a year before the convention meets, and that committee should decide upon two or three individuals, who should open that subject to the convention, they would naturally make thorough preparation. One or two would lead the discussion, and then throw it open to the convention. Another thought, at least a month before the meeting, have the programme published and distributed through the profession, so that when we come together we should know certainly what some of

the leading topics to come before the convention would be. That committee should have the power, if there were miscellaneous papers presented, and the ground had been gone over and over again, to ask the individuals to withdraw their papers or return them.

I will read my resolution :

In consideration of the size and importance of this convention, and the desirability of more systematic preparation for future meetings, it is hereby

Resolved, That the Executive Committee is hereby instructed and authorized to appoint a committee of three, of themselves or others, to devise, arrange, mature, adopt and announce a detailed programme of the literary exercises of our next convention a reasonable time before holding it..

I move its adoption.

THE CHAIRMAN : You have heard the resolution which Dr. Noyes has offered. The resolution is before the house. (Secretary reads the resolution.) The question is on the adoption of the resolution.

MR. HAMMOND, of Illinois : It strikes me that it is a little indefinite. I move that instead of "a reasonable length of time," we insert the words, "ninety days before the gathering of the convention."

MR. ELY : If Mr. Hammond will make it a little longer time, six months, I think it will be better.

DR. NOYES : When I considered who composed the Executive Committee, I thought the probabilities over ; I thought of a year, and I thought of six months—but when I thought who composed this Executive Committee, I thought it was perfectly safe to leave a little discretion with them, and I thought "a reasonable length of time" would cover it.

MR. WESTON JENKINS : I coincide with the views of the last gentleman, and trust the amendment will not prevail.

MR. ELY : I can conceive of circumstances, where the Committee would not be able to report three months before the convention. Therefore, I think it ought to be left with the Committee to do their best.

THE PRESIDENT : The question is on Mr. Hammond's amendment, to add the words, "Ninety days."

MR. WESTERVELT : I would like to ask if the Convention is now considering the report of the Committee.

THE PRESIDENT : The report of the Committee is received, and lies upon the table subject to call.

MR. WESTERVELT : Is this resolution an amendment to that report ?

THE PRESIDENT : This is a separate resolution, and the question is now upon Mr. Hammond's amendment to insert ninety days.

MR. CROUTER : Do I understand the Chair that this resolution of Dr. Noyes is an amendment to the report of the Special Committee ?

THE PRESIDENT : The Chair does not so understand it.

MR. CROUTER : Do I understand that the report of the Special Committee has been received by the convention ?

THE PRESIDENT : The report has been received, but not adopted.

MR. WESTERVELT : It virtually lies upon the table.

THE PRESIDENT : The question now before the house is upon Mr. Hammond's amendment to Dr. Noyes' resolution. Mr. Hammond moved to insert the words ninety days. All those in favor of the amendment signify it in the usual way ; those opposed, by the same sign. The amendment is lost.

The question is now upon the original resolution of Dr. Noyes.

MR. TERRILL, of Florida : Before the resolution is passed, I wish to say that, before we adopt the report of the Committee, I think it is in order to define the duties of that Committee.

THE PRESIDENT : The question is upon Dr. Noyes' resolution at present.

MR. TERRILL : I earnestly hope that Dr. Noyes' resolution will be passed by the Association, as it has a direct bearing on that question.

THE CHAIRMAN : All those in favor of the resolution offered by Dr. Noyes, manifest it in the usual way. Opposed, by the same sign.

The resolution is adopted.

(Dr. Wilkinson resumed the Chair.)

MR. ELY : I wish to offer a resolution right in keeping with this subject. The attention of the Convention was called yesterday morning by Dr. Bell to a resolution passed at the last Convention of Articulation Teachers of the Deaf. To carry out the purpose of that resolution I offer the following :—

WHEREAS, At the last Convention of Articulation Teachers of the Deaf, a resolution was adopted looking to the formation of a Section of the American Instructors of the Deaf, "for the promotion of articulation teaching ;" therefore, be it

Resolved, That the oral teachers of this Convention be invited to form a section for the purposes indicated, to be organized under its own officers, the hours of meeting to be determined by the appropriate committee of the Convention, and to be so ordered as to harmonize with the general meetings and with the Normal section.

I move this resolution.

THE PRESIDENT : You have heard the resolution offered by Mr. Ely. All those in favor of the adoption of this resolution manifest it in the usual way ; those opposed, by the same sign. It is carried.

MR. ELY : I move the adoption of the report of the Special Committee read a little while ago.

DR. GALLAUDET : Allow me a word of introduction in reference to that report. It is with some surprise that I see a disposition manifested to proceed at once to do what the Committee appointed yesterday to advise the convention, have said they find it extremely difficult to do, and for the doing of which they ask time for the maturing of plans and for the bringing of these matters proposed into a shape that shall commend itself to persons of judgment and calmness and deliberation. Mr. President, the Conventions of Instructors of the Deaf in America are without parallel in the history of the world. A measure of success has attended them, which has not been equalled in any country. The period of their history covers forty years, the first convention having been held at this Institution in 1850. The method and manner even of their holding, of the organization, of the bestowal of power upon a committee in the guiding of a convention has proved suc-

cessful beyond that of any association with which I have any acquaintance. Now, it was proposed yesterday to take measures to bring about certain radical changes in the arrangements of this convention, in holding its meetings and electing officers, and many suggestions have been made. The members of the Committee have taken pains, within the last twenty-four hours, to communicate personally with many members of the convention. Suggestions have been asked and received. Three meetings, as the report says, have been held, and much time, much thought, and much effort have been given to the consideration of this great subject; and the Committee make the report that there is not time to advance to the making of radical changes in the organization during the sitting of this convention. Mr. President, I make no appeal for the support of the report by the Committee. The Committee is the convention's own. The convention has had unparalleled success in its arrangements for now forty years. I think the oldest officers, not to speak of the youngest, would consider that we ought to take time for reflection before proceeding to make a change so radical. I, therefore, Mr. Chairman, hope and believe that the report of the Committee will be adopted.

DR. G. O. FAY: I recognize the possibilities and the difficulties involved in any modification of our policy, as a convention. I have considered, with the other members of the Special Committee, the several topics that have come under its consideration, and I sympathize fully in the conclusion arrived at. I think that the recommendations made are the very best for us to adopt at present; and I heartily hope they will be adopted by our convention, and without division. I thank the gentlemen for their kindly reference to me in discussion, however much I may disapprove of the use they propose to make of me, but I believe the action proposed by your Special Committee is the very best for our action, and I hope there will be no disposition to vary from it.

MR. WESTERVELT: I wish to say a few words in relation to the amendment I proposed, when the adoption of this report was recently before the convention on the motion of Mr. Noyes. The convention that we hope to hold in Chicago in 1893, will differ from any that have been held heretofore; we have always been entertained as guests at institutions, and a great deal of money has necessarily been expended for our entertainment, and the Superintendent has had to do an immense amount of work, acting as chief executive officer (under the title of "local committee"), in advance of the formal election of a president. Before our next convention it will be necessary for some one to act in the place of the accustomed Superintendent-Local-Committee, to expend our money instead of that belonging to a school, and if arrangements are made for our accommodation, it will have to be at our expense instead of, as heretofore and as at this convention, at the expense of the Institution which provides us with every convenience, free of charge. To provide the place for holding our meetings and for the entertainment of a large body of teachers in an overcrowded city, will be a great burden for some one. The Executive Committee of course can assume it, or it can delegate the responsibility; the convention, however, is equally competent, and under the circumstances of

our next meeting, which will be quite like those to which other associations of teachers have long been used, it was thought wise for us to adopt *their* well-matured customs, and have the management of our convention in the hands of a man whom we should elect. The resolution providing for this action was offered with no thought of casting a reflection upon the management of the permanent Executive Committee. No member of the convention can fail to be grateful to the Committee that has, for so many years been in charge of the affairs of the Teachers of the Deaf in America; they publish the quarterly, they manage our conventions, and have done all with general acceptance. It seems, however, as if there were at this time occasion for a different plan of procedure; at our next subsequent gathering, we could return to the methods which have been satisfactory to the profession in the past. I should have been glad to have the resolution carry, and should offer it again if it were not for what has just been said. I think we need a one-man responsibility, and had we elected a responsible man, a man who manages the affairs as we have seen Dr. Fay, he would have managed the next convention with satisfaction to the teachers of the deaf and with honor to himself. I am sure we should have all been glad to show our esteem for one of our most distinguished associates, by electing him now as president of our next convention.

MR. ELY : I think there are only one or two things in the resolution, which, however, is not before the house, of Mr. Westervelt's, that are not already incorporated in the report of the Committee that the convention made yesterday. The recommendations, if I remember right, (and I should like to have them re-read for the benefit of the convention) were that the Executive Committee have charge of the entertainment and arrangement for this convention to be held possibly not in Chicago but near Chicago. I will call for the re-reading of the resolution and report of the Committee.

(The Secretary reads the resolution and report.)

MR. ELY : It seems to me that covers everything but the election of a president, and if we want to arrive at something definite, we might first decide upon this point.

MR. WESTON JENKINS : I do not exactly understand the status of business. As I understand, he offers as a substitute his resolution, and I second it.

I will simply say that, not differing at all with the sentiments of the report and acquiescing entirely in the force of the statements made by the president of that Committee, it seems to me very clear that this convention has now reached one of its turning points. It has outgrown the methods which have worked so admirably hitherto under the very able and conscientious administration of that gentleman.

MR. DOBYNS : I rise to a point of order. Mr. Westervelt's resolution is a substitute for the paper now before the Convention.

THE PRESIDENT : Before the house is the adoption of the report of the Committee.

MR. SWILER : I would like to have one word in regard to the adoption of the report of the Special Committee, and would say that not long ago the Standing Executive Committee was enlarged by the ad-

dition of two gentlemen, one from the Province of Ontario, and one from the South, which will increase the usefulness, power and efficiency of the Committee. In view of the enlarged Committee and the increased usefulness we expect from it, I suggest that we adopt the report of the Special Committee as offered, and trust to the supreme wisdom and guidance of the gentlemen composing the Standing Executive Committee who have so long and so well arranged for, provided for, and carried out every measure that our American instructors have ever adopted. Among other things that have had to do with our best interests, are the publication of the *Annals*, the preparation of reports, and the contrivance of ways and means by which our meetings should be more efficient. And I ask if they have not abundantly proved their efficiency. I trust this resolution, practically giving to the present Executive Committee the power to conduct all the affairs of the convention, will be adopted.

THE PRESIDENT : Are you ready for the question ?

All those in favor of adopting the report of the Committee will manifest it by the usual sign. Those opposed, by the same sign. It is unanimously adopted.

MR. SWILER : I now move that the Standing Executive Committee be appointed as the Committee recommended in the report just adopted.

THE PRESIDENT : You have heard the motion of Mr. Swiler. All those in favor of it will manifest it by the usual sign. Those opposed, by the same sign. The motion is carried.

DR. G. O. FAY : I would like to announce that "How to Conduct Recitations," by J. L. Smith, of Minnesota, will be the first paper to-night.

THE PRESIDENT : A telegram has just been received, directed to Dr. A. Graham Bell, which the Secretary will read :

(Read by the Secretary.)

"Please present my regrets to the President of the Convention. Prior arrangement has detained me here. Have expressed a paper."

"J. C. GORDON."

The convention then, upon motion, adjourned to half-past seven.

TUESDAY EVENING, AUGUST 26.

The Normal department of the convention was called to order by Dr. G. O. Fay, at half past seven o'clock, who announced that the first paper of the evening, "How to Conduct Recitations," by Prof. J. L. Smith, of Minnesota, would be read by Dr. J. L. Noyes, Principal of the Minnesota Institution for the Deaf and Dumb.

DR. NOYES : If the friends will keep quiet, I will try to make myself heard. The writer of the paper that I hold in my hand is Prof. J. L. Smith, a graduate of the National Deaf-Mute College, and one of my most reliable teachers. He fully expected to be here in person to present this paper, but when I left home he informed me that duty called

him to remain at home, and he wished to see that the paper was presented to the convention. I will read the paper just as he prepared it, and as a large and influential part of this convention is composed of ladies—ladies of experience and ability—I wish that we might have more of them on the platform, and therefore I have asked my daughter, who is one of my assistant teachers, to interpret to you the paper as I shall read it.

HOW SHALL RECITATIONS BE CONDUCTED?

By J. L. Smith, of the Minnesota Institution.

The daily recitation is the surest test of the progress of the pupils and of the capability of the teacher. It becomes, then, a matter of importance to determine how recitations shall be conducted to obtain the best results.

In a class taught by the manual method, there are two ways of reciting—(1) by writing, (2) by finger-spelling. In seeking to discover which of these is preferable, two points must be considered—economy of time, and the general welfare of the pupils.

The method of recitation by writing is the one most used in our schools, though signs and finger-spelling are employed, in an auxiliary manner, to a greater or less extent.

In its relation to economy of time, the written recitation does not stand in a favorable light. The labor of correcting, one by one, the written exercises of a class of fifteen or twenty pupils, is immense. If the teacher aims to do the work carefully and faithfully, interpolating the necessary explanations and illustrations for each pupil, considerable valuable time is consumed. Much of this correcting and explaining is mere repetition, since different pupils frequently bring forward the same errors. While the teacher is busy correcting, a large proportion of the pupils are idle. One of the most difficult problems of the classroom is how to keep the pupils occupied while the correction of exercises is proceeding. Giving the pupils additional work to do will not mend matters, as they can fill their slates in much less time than the teacher can correct them. Some teachers adopt the expedient of correcting exercises outside of school hours. This is a bad policy. Corrections thus made are almost valueless to the pupils, because few of them care enough about their daily work to critically examine errors which are one day old.

We will now view the written recitation in its relation to the welfare of the pupils. I prefer to treat this phase of the question from a purely hygienic standpoint. Consider what a vast amount of writing our deaf boys and girls do during their school course. Day after day they sit at their desks, curled up into all awkward shapes, bent forward, lungs contracted, limbs distorted, eyes strained, either too near or at a wrong visual angle. Step into any classroom while the pupils are writing, and look around. How few occupy an easy, graceful position. How many are in attitudes that are detrimental to the free and healthy circulation of the blood. These children are all growing;

their bones are flexible; and all their vital organs are peculiarly susceptible to injury.

One of the most eminent opticians in this country has said, that the increasing frequency of short-sightedness in children and young people is due to the habit of bending forward much in reading, writing and study. In our zeal to develop the intellectual energies of our charges, we are apt to overlook their physical well-being, or trust to out of school influences to attend to it. Deaf children are subject to more restriction of healthful activity than is good for them. First, there are several hours in the school-room, necessitating so much bending forward over books and slates. Then come several hours of industrial work—sewing, tailoring, shoemaking—also requiring more or less bending forward. Last of all is the evening study-hour, by artificial light, a repetition of the school-room work.

The recitation by finger-spelling relieves this constant strain. While reciting, the pupils can occupy easy, natural, upright positions; or, better still, they may be required to stand up. The teacher stands before the class. The true teacher will never sit while conducting a recitation or addressing the class. The attention of all is fixed upon him. Then is given the opportunity for the exercise of the highest and truest powers of the teacher, as shown in the skill and ingenuity with which questions are asked.

A prominent educator of America says, "He alone is a good teacher who is not, like Peter Lombard, a 'master of sentences,' but, like Socrates, a master of questions. * * * The real pedagogue—child-leader—is the child questioner. To question well is to teach well."

To educate a child, as plainly evinced by the etymology of the word—*educere*, to lead forth, is not to fill up its mind with the varied information found in a text-book, or possessed by the teacher; but it is to skilfully and carefully "lead forth" the mind of the child, causing it to gather and assimilate knowledge for itself. In no better way can this be done than by judicious questioning. For this, the method of recitation by finger-spelling offers the greater scope.

Questions may be varied to suit the understanding of the pupils. A dull pupil may be helped and encouraged by leading questions. If a pupil recites by rote, a searching question will make it clear, whether or not the pupil really understands what he says. Pupils who have failed to comprehend certain parts of the lesson, may be enlightened by observing the answers of their classmates. If a pupil rambles from the point, he can be promptly checked, and waste of time prevented.

But the chief advantage in this way of reciting, is that all corrections and explanations are made to the class as a whole, and not to individual pupils, as in the written recitation. Repetition is thereby avoided, and time saved. Unlimited opportunity is given to the teacher for the introduction of illustrations and incidents calculated to augment the interest of the pupils, and for the elucidation of difficult parts of the lesson.

Finger-spelling cultivates quickness of perception, rapidity of thought, closeness of attention, conciseness of expression. And the knowledge that their answers are seen and criticised by their classmates, will act as a stimulus to the pupils to do their best.

The daily recitation should include the following features :

1. A review of the preceding lesson.
2. Testing the knowledge of the pupils concerning the lesson of the day.
3. Instruction on difficult or obscure points.
4. Assigning the next lesson.

Reviewing the preceding lesson should be esteemed an important feature of our daily work. It is not what we eat, but what we digest, that gives nourishment to the body. It is not what a child learns, but what its mind retains and assimilates, that contributes to intellectual growth. A few comprehensive questions, judiciously put by the teacher, will suffice to determine how much, or how little, of the preceding lesson has been retained by the pupils.

That the pupils' knowledge of the lesson for the day may be thoroughly tested, it is indispensable that the teacher should study the lesson carefully, and have an entire comprehension of it in all its bearings. No one is competent to teach a subject, who is not entirely familiar with it ; and no one can become familiar with a subject, who does not study it. Explanations of obscure points in the lesson should be prepared ; definitions and synonyms of new words made ready, idioms noted ; and, in the course of the recitation, it is a most excellent practice for the teacher to use the wall slates freely, writing down certain forms of speech, illustrative sentences, bits of information, definitions and synonyms, which are, thus, much more likely to become fixed in the minds of the pupils.

Assigning the next lesson deserves more attention than is usually given to it. "Finish the chapter," "Take next lesson," "Study pages 10 to 15," "Go to end of first paragraph on page 20," are some common methods of assigning a lesson, and they are to be unreservedly condemned. The teacher should go over the next lesson in advance, and when he assigns it, he should point out its connection with the preceding lesson, or lessons ; at the same time making the pupils acquainted with its salient points.

For conducting a recitation as above outlined, the method of finger-spelling is clearly the most advantageous. I have followed that method for six years ; one year with a class of four-year pupils, and thereafter with more advanced pupils. I have often had recourse, temporarily, to the written recitation for the sake of comparison. The result has invariably convinced me of the superiority of the finger-spelling method, both as regards economy of time and the progress of the pupils.

In the *Annals* for last April, Professor A. G. Draper treats of "The Manual Alphabet in Schools for the Deaf," in a valuable and suggestive article. We all recognize that there is a lack of understanding of ordinary finger-spelling among our pupils. I am inclined to think that this is due, in great part, to the excess of written work in our classrooms, and the lack of sufficient exercise in connected questions and answers by means of the manual alphabet. I believe that, if finger-spelling were made the general method of conducting classroom exercises throughout the whole course, there would be an appreciable improvement among our pupils.

To sum up, the advantages of recitation by means of the manual alphabet may be outlined as follows: It saves time. Spelling on the fingers is a more rapid means of communication than writing. It is far more in conformity with hygienic principles than writing. It gives the broadest scope for the exercise of the teacher's individuality. It enables the class to work more together, adds variety, and lends increased vivacity and interest to the routine of the class-room. Finally, it is the method which most closely approximates the course followed in our public schools. And we may rest assured that the nearer we approach these schools in our methods and results, the nearer we are to bridging the gulf, which centuries of neglect, ignorance, and misapprehension have placed between the deaf and the hearing child.

THE CHAIRMAN: For the benefit of those members who were not present at the afternoon session of the convention, and did not have the pleasure of seeing it, Madame Alberti has kindly consented to repeat the recitation of the hymn.

DR. PEET: Dr. Fay has requested me to say that in this repetition of the hymn that was given this afternoon, Miss Constant will sing it, while Madame Alberti gives it in appropriate signs. ["Nearer, My God, to Thee," was then recited.]

THE CHAIRMAN: The next exercise will be given by Mr. Edmund Lyon, of Rochester, who will describe a Phonetic Manual devised by himself and used, to some extent, in the Western New York Institution.

A PHONETIC MANUAL.

By Edmund Lyon, of Rochester.

Mr. President and the Members of the Convention: In some respects my appearance here to-night is peculiar. I am an outsider and a layman, interested, however, in the education of the deaf, and share with you the common interest and aim to fit those perhaps in some respects less fortunate than ourselves to battle with the serious things of life. It is wholly upon this ground that I presume to ask your attention and indulgence.

Invention and exposition do not at all go hand in hand, so if I fail to make a satisfactory presentation of this manual, which is somewhat pretentiously entitled, I shall not surprise myself, nor need you be disappointed. In the limited time which is at my disposal, I may only hope to give a general idea of the new manual, together with a few of the reasons for its existence, and, if time will permit, also some of the objects which we hope may be attained by its adoption.

It is sometimes interesting to follow the development even of those schemes, whose results we may not be altogether willing to accept. So perhaps the most agreeable way, in which I can afford a general apprehension of this manual and the principals which underlie it, is to let you follow the history of its development as it has advanced step by step, from arbitrary and unsuggestive letters up to speaking symbols. I use the word "speaking," because in the manual now under

consideration a signification attaches to the different parts of the hand, so that each position has a story to tell for those who understand its language. The several positions of the hand, now not only represent various speech sounds, but have embodied within them a clear and concise statement of the way in which the represented sound is physiologically or mechanically produced.

Many months ago, I began the preparation of a manual which should have for its chief recommendation speed ; but as the work advanced, its scope widened until, finally, were attained the results which are represented in the chart now before you. At the outset my qualifications for the task were very meagre. They consisted principally of a practical knowledge of phono-stenography, a very imperfect idea of the educational methods employed among the deaf, and a wholly incorrect notion regarding the ease and rapidity with which they could express their thoughts. Had I at that time been aware of the great facility of inter-communication among the deaf by means of the sign-language, or had I been told that in a single institution there were scores of pupils who could spell at the rate of from 125 to 150 words per minute, I certainly should have hesitated a long time before attempting the inauguration of any improvement. It seemed to me, however, from my limited observation, that the facility of inter-communication among the deaf was not what it should be, and might be greatly improved.

In many respects the eye is superior to the ear, and is capable of recognizing nicer distinctions. This is illustrated in a comparison of the powers of the eye and ear, in the detection of shades of color on the part of the one, and the detection of pitch on the part of the other. Evidently, therefore, the deaf were not lacking in their ability to perceive and apprehend visibly represented speech sounds, but were apparently in need of a more perfect mode of representing such sounds. If only a method could be discovered whereby their dexterity in representing sounds could be made commensurate with their power of perceiving them, then the greatest possible facility for the interchange of thought would be attained.

My experience in the use of phonography had shown me that it was possible to transmute speech sounds into legible characters as rapidly as they could be uttered and afterwards with the same rapidity to re-transmute those characters into the original sounds. This suggested the advisability of calling the phonetic principle into requisition, and I at once set about devising my first manual, which had for its foundation that loose, but practical, analysis of speech sounds employed in ordinary shorthand writing. The positions of the common manual were retained as far as available, only being modified or replaced when incompatible with an easy and rapid transition from one position to another. To this end especial study and attention was given to the sequence of sounds as they occur in spoken words. This was also borne in mind in the selection of new positions to represent sounds not already particularly provided for. To such an extent was the primary object of the manual attained, that with a few weeks' practice I was able to spell at the rate of 115 words per minute, whereas a much longer use of the old manual had only enabled me to spell at the rate of 80 words per minute.

Last spring this manual accidentally came to the notice of Prof. Z. F. Westervelt, Principal of the Rochester Institution. He thought he saw in it sufficient merit to warrant him in making an experimental use of it in his school. I think he did not take into consideration the element of speed so much as he did the fact that it was a phonetic manual; that it provided a convenient and ever present mode of representing words as spoken and of giving to each sound a positive and invariable symbol—thus affording a certain stimulus to the memory of the deaf and aiding them in their efforts at articulation.

It, however, soon became apparent to the faculty and myself that the new manual, although possessing speed, failed to have many other qualities of far greater importance. It was phonetic but extremely circumscribed. Its positions represented invariably the same sounds, but those positions gave no hint regarding the formation of the sound. Being thoroughly convinced that no amount of patching could make this manual satisfactory to the profession I abandoned it entirely and started anew.

This time I built on a more worthy foundation. I have done myself the honor of following Dr. Bell's exquisite analysis, which is so simple and yet so exhaustive. In regard to the scope of the manual, which is now submitted for your consideration, I need only say that it clearly sets forth all of the characteristics which are involved in Dr. Bell's scheme of Consonants, Vowels, Glides, and Combinations.

I will first explain the consonant positions, and endeavor to show how they indicate the various consonant characteristics.

The positions of the hand are, as I have intimated, descriptive of the vocal organs and their functions, so, in order to understand the manual, we must hold clearly in mind certain fundamental facts regarding those organs. Aside from the Throat, whose consideration I shall for the present postpone, the modifiers consist of the Back of the Tongue, Top of the Tongue, Tip of the Tongue, and the Lips. The Back and Top may be regarded as posterior, and the Tip and Lip as anterior modifiers. In representing the posterior modifiers the hand is held at an angle to the arm, while in representing the anterior modifiers the hand is upright or in line with the arm. This will be readily understood by reference to the chart, which shows the various consonant positions. It should be observed that in changing from one position to another the palm of the hand always remains in the same plane, and that the arm is held substantially motionless, it being permitted neither to twist nor to sway.

In the manual, the Back is distinguished from the Top, and the Lip is distinguished from the Tip, by the direction which the lower phalanges of the fingers take, relatively to the palm of the hand. The Back and Lip, having the lower phalanges of the fingers, take relatively to the palm of the hand. The Back and Lip having the lower phalanges of the fingers in the same plane as the palm. The Top and Tip having the lower phalanges of the fingers at right angles to the palm. It will, therefore, be seen that the Back is exactly like the Lip except, that with the Back the hand is held at an angle to the arm to indicate a posterior position, while with the Lip, the hand is held upright to indicate an anterior position. A similar relation exists between the Top and the Tip. The reason for this resemblance between the Back and

Lip, and between the Top and Tip is the fact that when in the formation of consonant sounds the Back of the tongue is not employed alone, it is always mixed or used in conjunction with the Lips and *vice versa*; and when the Top of the tongue is mixed it is always mixed with the Tip of the tongue and *vice versa*.

		Tongue			Vocal	
		PRIMARY	MIXED	DIVIDED	MIXED-DIVIDED	SHUT. NASAL
C						
THROAT		O	O			X
O						
BACK		C	C	C	C	C
N						
TOP		C	C	C	C	C
S						
POINT		C	C	C	C	C
O						
LIP		S	S	S	S	O
Vocalized						
N						
THROAT		O				
A						
BACK		C	C	C	C	C
N						
TOP		C	C	C	C	C
T						
POINT		C	C	C	C	C
S						
LIP		S	S	S	S	O

Having fully described and illustrated the four general positions of the hand which indicate the Back, Top, Tip, and Lip, it now remains for us to show further differentiations of those general positions and their significations.

■ The second and third phalanges of the fingers and thumb are still available in all of these general positions with which to make specific modification. As a signification attaches to these modifications which is invariable, I may speak of them generally.

Great care should be exercised in changing the positions of the

second and third phalanges of the fingers, so as not to throw their first or lower phalanges out of position. These latter phalanges *must* always be parallel, and must either be in the plane of the palm or at right angles thereto, a failure to observe this will result in the formation of anomalous and meaningless positions.

The first and second fingers are always descriptive of the character of the opening at the point indicated by the general position of the hand. When one and only one of these fingers is straightened the orifice is represented as single or Primary. When both of these fingers are straightened and in contact with each other, the orifice is represented as consisting of two parts or Divided. When neither of these fingers are straightened the orifice is represented as being, at the inception of the sound, wholly wanting or Shut.

The third and fourth fingers always indicate that the consonant is, or is not, Mixed. When both of these fingers are straightened and in contact with the other straightened fingers, we are given to understand that two modifying positions are used in conjunction to produce the represented sound, but that the modifying position indicated by the general position of the hand is primary, and the other modifying position secondary or auxiliary. Thus when one and only one of the fingers which are descriptive of the orifice is straightened at the same time that these fingers are straightened, and is in contact with them, a Mixed consonant is represented, and when all the fingers are straightened and in contact with each other, a Mixed-Divided consonant is represented.

The second phalanx of the thumb always relates to the manner in which the breath is used. When this phalanx is carried out beyond the side of the hand, and is out of contact, it represents the breath as passing into the nose or Nasality. When the phalanx occupies any other position it represents the breath as passing into the mouth. In forming a consonant position this phalanx of the thumb is never permitted to lie diagonally across the palm.

Whenever the breath is accompanied with voice, the upper or terminal phalanx of the thumb (which always refers to voice) is brought in line with the second phalanx, and whenever the breath is unaccompanied with voice the upper phalanx is bent at right angles to the second phalanx.

In reading the fingers we begin at the index side of the hand and give positive attributes to all straightened fingers which are in contact with each other, and negative attributes to all fingers which are bent or which are separated from straightened fingers standing nearer to the index side of the hand.

Alone, in the representation of throat positions, are negative attributes given to the fingers by separating them. This constitutes the distinguishing feature between the Throat and the Back positions.

By means of these general positions and their modifications, fifty-two positions of the vocal organs are clearly and accurately described.

In regard to the vowel positions I will simply say that they are thirty-six in number and fully set forth all the functions of the vocal organs while producing the sounds which they represent. The vowel positions are wider and firmer than the consonant positions, thus hinting at the physiological difference between vowels and consonants.

The Glides follow, and are in perfect harmony with the principles which underlie the formation of vowel and consonant positions. Moreover, a way is provided for an easy transition from the vowel to the glide position, so that the former merges into the latter by a gliding movement thereby portraying the actual operation of the vocal organs.

Time will not permit me to dwell upon the advantages which might be expected to accrue to the deaf from the adoption of this or some similar mode of representing speech sounds. I will, therefore, without further remarks submit for your indulgent consideration this phonetic manual, which is the outgrowth of a sincere desire to narrow the chasm which separates us from our silent brothers and sisters.

DR. PEET : I would like very much to see a practical illustration in a sentence.

MR. LYON : I will give one line, "Now I lay me down to sleep ;" illustrating it.

MR. WESTERVELT : I should like to say a few words with regard to Mr. Lyon's manual, which has been used by our advanced classes with great satisfaction both to teachers and pupils. The revised form, which has been presented to you this evening, based upon the scientific presentation of positions of the vocal organs in Visible Speech, is, we think, a valuable device for teaching speech to the deaf. It was used with some of our classes for about two weeks before school closed ; the knowledge which pupils had previously of Bell's symbols, enabled them to learn to use the manual readily, because they apprehended—what Mr. Lyon has explained to us this evening—the arbitrary but significant and clearly defined relation between the parts and positions of the hand in his phonetic manual, and the different positions of the vocal organs modifying the current of breath and voice in the production of speech. It has been a pleasure to the scholars to study out their individual peculiarities of speech, and present them in this manual. Any one, watching a class practicing the phonetic manual, will see that the thought is concentrated, primarily, upon the action of the vocal organs, the positions taken by the hand being secondary.

Mrs. Mills, in her Chinese School for the Deaf, will find this alphabet a help ; she says that the pronunciation of Chinese is much more easily acquired by the deaf than English, but the language of "lip-reading" does not present a satisfactory medium for intercourse among her deaf pupils, so that she has felt the need of some form of manual alphabet which the pupils could use ; the twenty-seven characters of our ordinary manual alphabet, not being adaptable to Chinese words, which are not alphabetically written. She has used Bell's Universal Visible Speech Alphabet to write out the Chinese words she has wanted to teach, and finds her deaf pupils learn to write and read words in this form much more readily than they do in the picture form used in that country. She is delighted to hear that her Chinese children will soon be enabled to acquire a colloquial use of the Mandarin dialect through a Visible Speech manual.

MR. LYON : I took the liberty to prepare for distribution to the members of the convention some photo-engraved charts of the

phonetic manual alphabet, but through delay in the delivery of baggage, I am unable to present them to-night. Should they come before the close of the convention, I should be very glad to present copies to any who desire them.

DR. BELL: I think that a phonetical manual alphabet like that devised by Mr. Lyon may be a very important aid to articulation teaching. I have long felt the need of some means of presenting rapidly and clearly to the eyes of deaf children the exact pronunciation of our language. Unfortunately ordinary spelling does not do this. It is unphonetical—nay—more than unphonetical, it is misleading. Artificial difficulties are introduced. Children try to pronounce words as they are spelled, and the results, I am afraid, are sometimes rather startling to unaccustomed ears. Speech-reading is ambiguous, and though pupils may gather the sense of what we say from the mouth, they cannot see details of pronunciation, upon which good speech depends. Many of the actions of the vocal organs are entirely concealed from observation.

If our pupils are ever to speak well, they must see speech as others hear it. The details of pronunciation must be presented to their eyes as clearly and unambiguously as sounds are presented to the ears of ordinary children. Not only so, but the words must be presented again and again—not once, not twice, but hundreds and thousands of times. Constant repetition to the eye is necessary in order to impress the correct pronunciation upon the memory. I consider a phonetical representation of speech, as absolutely necessary to good articulation, in the case of the deaf. Without it, the articulation tends, in process of time, to become vague; and imperfections arise, which detract from the quality of the speech, though they do not necessarily interfere with intelligibility.

The unphonetical nature of our spelling seriously retards the acquisition of speech by our pupils, and renders the introduction of oral methods slow and laborious. In countries like Germany and Italy, where the phonetical difficulty does not exist (for the spelling corresponds to the pronunciation), articulation teaching is universal. The difficulty in English speaking countries is entirely artificial. Our language is certainly more easy for a deaf child to speak than the German, with its difficult gutturals and combinations of consonants; yet articulation teaching is less successful in English speaking countries than in any other. I attribute this largely to the unphonetical nature of our spelling.

We need books in phonetical type, and a rapid means of writing or spelling phonetically. Numerous books have been printed in England in the Pitman and Ellis type, and these might perhaps prove useful as reading matter for our articulation pupils. The symbols of visible speech probably form the best phonetical characters yet devised, but printed books in visible speech have not yet been prepared, nor are the ordinary symbols well adapted for rapid use. Various forms of the symbols were given to the world by my father—capital and lower case letters, script forms, and shorthand characters. In our schools for the deaf, the capital letters alone are usually employed, so that the phonetical writing, though clear and distinct, is slow and laborious. My father has more recently modified his shorthand characters for the

special use of the deaf into a system of letters, which he terms line-writing. Unfortunately, however, no books in line-writing have yet been prepared for the use of the deaf, nor has the system been fully explained to teachers. I have no hesitation in expressing the opinion that line-writing forms the simplest system of phonetical writing that has ever been offered to the world. It is not so rapid as shorthand, but much more easy and rapid than ordinary writing, and it is destined, I have no doubt, to be of great value in articulation work. A phonetical manual alphabet would probably form a still more expeditious and life-like method of presenting pronunciations to the eyes of the deaf. My father and I both tried our hands at the invention of such an alphabet many years ago, but our ideas were not developed into practice, nor taught to others.

We certainly need a means of presenting pronunciations clearly and rapidly to the eyes of the deaf, and such a means is offered to us now by Mr. Lyon and Mr. Westervelt. I hail the appearance of this new manual alphabet as a germ from which something great and important will undoubtedly be developed for the good of the deaf.

THE CHAIRMAN: The next paper will be "Books and Reading for the Deaf," by Prof. Thomas F. Fox, Assistant Librarian of the New York Institution.

READING AND BOOKS FOR THE DEAF.

By Thomas F. Fox, of the New York Institution.

The best criterion, of successful teaching of the deaf, is the continuance of right reading habits beyond the school. Yet a survey of our school courses presents a strong indictment of some one's neglect. We devote our energies to almost everything else, to arithmetic, history, geography, penmanship and so on, but how many of us make reading a regular class-room exercise? In our work, this branch appears to occupy the last, sometimes the least, of our consideration.

Now as congenitally deaf pupils, as a rule, do not read voluntarily, it becomes necessary to *teach them how to read*. There is no habit more worthy of encouragement, no art better deserving to be taught—especially as it forms the most important element of language work, and is the key to all the future mental progress of our pupils. The difficulties which beset them in mastering language, rob reading of most of its pleasures for them. It consequently requires *persistence*, and not a little *ingenuity* to make *them* appreciate its value. But once let us kindle the flame and reading itself will supply the fuel.

The practical question is, "How and when shall I begin to create a love for reading in my pupils?" Begin in the primary classes; sow the seed as early as possible. In the beginning, let our deaf pupils be treated to the same stories that so tickled ourselves when children. The sooner they are introduced to books written for hearing children, the better, for the phrases thus picked up will be such as are of most use in daily intercourse. Linen or paper covered books of jingles daintily illustrated, amuse them, and their tender minds receive their

first impressions in the right direction. Imagination is the hearing child's world; he revels in imaginative stories. Why should this not be the case with the deaf child? But in the majority of instances, the little mind is starved. Ask any ordinary class of little deaf children how many have been told of "Cinderella?" Very few, if any. "Dear Old Mother Goose" is an unheard of personage. Explain one of the rhymes to them. How their faces brighten, how ready they are for more. Give them, then, an opportunity to learn about "Little Red Riding Hood," and kindred heroics, and we shall be certain to interest them. For several years, I have been endeavoring to discover a method of creating in my advanced pupils a taste for general literature, and have lately employed the following plan.

We form ourselves in a circle, each with a reader in hand, and one is selected to spell out a section of a piece previously agreed upon. When he has finished, I inquire if the section is understood by all, and when there are doubts as to the meaning of words and phrases, they are explained freely and fully, by spelling if possible, by signs if necessary. The dictionary is appealed to when necessary, and sometimes, when unnecessary, I refer to it myself to impress on the pupils the fact that even teachers go to the dictionary, and there is nothing to be ashamed of in referring to it frequently. On other occasions, the exercise is varied. Instead of using a reader, a selection from some poet is placed on the large slate, and a pupil is selected to give a translation of it in signs—for it may be laid down as a cardinal principle that if a deaf-mute can give the substance of a poetical selection in signs, he comprehends its meaning. If the pupil selected fails to comprehend it, I give an illustration myself, after which we discuss the selection, its words, phrases, its figures of speech and allegorical references, and I find that the exercise is producing good results. I believe there may be some better method than this, and I hope to profit from whatever experience other teachers of the deaf have had in this direction.

But whether in the school or beyond the school, we must always have an interested attitude towards what is read, if the reading is to be fruitful. Then to insure the assimilation of what is read, to make it really one's own, provision must be made for its discussion, or return in some form of essay or debate.

In this Institution's literary club, by requiring pupils to engage in discussions and debates on topics allied to their school work, we have been able to induce a wide range of general reading, to say nothing of valuable practice in concise essay writing.

An important question is, "What shall the pupils read?" Provided they have been properly trained, give them what they like to read; the only difficulty that will meet us is the consideration that the great majority of our pupils have a limited acquaintance with language. I am referring solely to congenitally deaf pupils, whose taste for reading must be acquired with much more difficulty than in the case of semi-mutes. During the past fifteen years the number of really good and interesting books has wonderfully increased, and no teacher need be at a loss for an hour, in reference to the first hundred that should be put into a school library, if only semi-mutes were to be considered. But leaving those out of consideration, the teacher finds it difficult to provide a list suitable for the immediate use of the congenital deaf

pupils, for in giving them what is beyond their comprehension they are discouraged; weariness and disgust are created in place of the enjoyment we had hoped to furnish.

In the course of preparing this paper, it was suggested to me to present a list of the best hundred books suitable for congenital deaf pupils from ten to twenty years of age. While it is difficult to lay down a list that would be acceptable to every teacher, it will be conceded that we need most of all, abundance of books on every day topics, in the simplest language that can be framed, and with plenty of illustrations. After a careful consideration of the books most frequently called for by our own pupils, it seems to me perfectly safe to put in such a list, books suitable for hearing children from the age of six to sixteen. Most of the books herein catalogued are among the books in our own library, those of the simplest language being designated by an asterisk. The balance are suitable for the more advanced congenital pupils and for semi-mutes.

Arabian Nights.

* Aunt Martha's Corner Cupboard; or, Stories about Tea,
Coffee, Sugar, Rice, etc. 1 vol. *Mrs. E. Kirby.*
Boyhood of Great Men. 1 vol. *John G. Edgar.*
Boy's Book of Famous Rulers. 1 vol. *Lydia H. Farmer.*
Boy's Library of Legend and Chivalry. 4 vols. *Sidney Lanier.*

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| 1. Froissart. | 3. Percy. |
| 2. King Arthur. | 4. Mabinogion. |

Boy with an Idea Series. 5 vols.

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| 1. The Young Mechanic. | 3. The Boy Engineer. |
| 2. Among Machines. | 4. The Boy with an Idea. |
| 5. The Young Designer. | |

Classic Story Series. 6 vols.

1. Siege of Troy and Wandering of Ulysses.
2. Stories of Old Rome and Wanderings of Æneas.
3. King Arthur; or Knights of the Round Table.
4. Shakesperian Stories, simply told; Comedies.
5. Shakesperian Stories, simply told; Tragedies.
6. Chaucer's Stories, simply told.

* Dick Travers Abroad Series. 4 vols. *Miss A. F. Samuels.*

Elsie Book Series. 6 vols. *Martha Finley.*

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| 1. Elsie Dinmore. | 4. Elsie's Womanhood. |
| 2. Elsie's Holidays. | 5. Elsie's Motherhood. |
| 3. Elsie's Girlhood. | 6. Elsie's Children. |

Eyes Right—A Bachelor's Talk with the Boys. 1 vol. *Adam Styroyn.*

Fairy Tales. 1 vol. *Hans C. Anderson.*

* Fairy Tales and Popular Stories. *Grimm.*

* Familiar Friends. 1 vol. *Olive Patch.*

Florence Stories, The, 6 vols. *Jacob Abbott.*

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| 1. Florence and John. | 4. The English Channel. |
| 2. Grimkie. | 5. The Isle of Wight. |
| 3. The Orkney Islands. | 6. Florence's Return. |

- Footprints of Famous Men. 1 vol. *John G. Edgar.*
 * Four Feet, Two Feet and No Feet. 1 vol. *Laura E. Richards.*
 Girl's Book of Famous Queens. 1 vol. *Lydia H. Farmer.*
 Good Old Times. 1 vol. *Rev. Elijah Kellogg.*

* Happy Home Library. 6 vols.

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| 1. The Happy Home. | 4. Helen in Switzerland. |
| 2. Battle and Victory. | 5. Louisa Broadhurst. |
| 3. Lost in the Jungle. | 6. Our Home on the Marshland. |

* Hyacinth Books. 7 vols.

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| 1. Willie's Hyacinth. | 4. Only Sallie's Story. |
| 2. The Lost Thimble. | 5. Little Italian Boy. |
| 3. Little Red Book. | 6. The Young Cottager. |
| 7. The Dairyman's Daughter. | |

- Joe Bently, Naval Cadet. *H. H. Clark.*
 Little Lord Fauntleroy. *Frances Hodgson Burnett.*
 Little Men. *Louisa May Alcott.*
 Little Women. " "
 Live Oak. *Rev. Elijah Kellogg.*

* Lives of our Presidents. *Helen W. Pierson.*

* Madame How and Lady Why ; or First Lessons in
 *Charles Kingsley.*
 *Earth Lore.*

* My Land and Water Friends. *Mary E. Bamford.*

" Oliver Optic's " Works. (Boat Builder, or other
 Series.) 6 vols. *W. F. Adams.*

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| 1. All Adrift. | 4. Stem and Stern. |
| 2. Snug Harbor. | 5. All Taut. |
| 3. Square and Compass. | 6. Ready About. |

Overhead ; or, What Harry and Nellie discovered
 in the Heavens. *Laura A. Nichols.*

* Pansy Books. 4 vols. *Mrs. G. R. Alden.*

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| 1. Five Friends. | 3. Getting Ahead. |
| 2. Pansy Scrap Book. | 4. Six Little Girls. |

* Picture Natural History. *Mary E. C. Boutell.*

* Popular Tales in Easy Words. 6 vols.

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| 1. Robinson Crusoe. | 4. Swiss Family Robinson. |
| 2. Pilgrim's Progress. | 5. Æsop's Fables. |
| 3. Evening's at Home. | 6. Sanford and Merton. |

* Raindrop, The. *James H. Logan.*

Rollo Books, The. 4 vols. *Jacob Abbott.*

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| 1. Rollo Learning to Talk and Read. |
| 2. Rollo at Work and Play. |
| 3. Rollo at School and Vacation. |
| 4. Rollo's Experiments and Museum. |

Science for the the Young Series. 4 vols. *Jacob Abbott.*

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| 1. Heat. | 3. Water and Air. |
| 2. Light. | 4. Force. |

Sea Kings and Naval Heroes.	John G. Edgar.
Sound Bodies for Boys and Girls.	William Blaikie.
Story of a Bad Boy.	T. B. Aldrich.
Story of Roland.	James Baldwin.
Story of Siegfried.	" "
True Stories from History and Biography.	Nathaniel Hawthorne.
Uncle Tom's Cabin.	Harriet Beecher Stowe.
Underfoot ; or, What Harry and Nellie Learned of the Earth's Treasures.	Laura A. Nichols.
What Mr. Darwin Saw on his Voyage Round the World in the Ship "Beagle."	

As a further aid to teachers in making a selection I give a list of the twenty books, which the readers of the *Congregationalist* under twelve years of age enjoyed and valued most highly. The young correspondents, 487 in all, selected the following list as their choice :

Little Lord Fauntleroy, 377	Eight Cousins, 122
Little Women, 272	Five Little Peppers, 118
Robinson Crusoe, 245	Anderson's Fairy Tales, 109
Swiss Family Robinson, 193	Grimm's Fairy Tales, 108
Uncle Tom's Cabin, 179	Under the Lilacs, 100
Little Men, 174	Youth's Companion, 99
Pilgrim's Progress, 153	The Bible, 98
Sara Crewe, 149	Hans Brinker, 88
Aunt Jo's Boys, 142	Arabian Nights, 86
An Old Fashioned Girl, 142	Alice in Wonderland, 84

It may in addition be of interest to mention here that, in little more than two years our pupils have used up two sets of the Elsie Books, a set of the Rollo Books, while we have now our second set of the Florence Books. Of the works of "Oliver Optic" and Horatio Alger, our pupils have literally devoured three complete sets of each within the past fifteen years. I have intentionally left out of this list such works as those of Dickens, Thackeray, Scott, and the like, as they are appreciated only by the most advanced of our pupils. In this Institution we make provision for this class by opening to them the privileges of the Teachers' Library, under certain restrictions. They are allowed to choose their own books, but the Librarian and Assistant take care to advise them when a work apparently beyond their comprehension is called for. In addition, these advanced pupils are allowed to share in another privilege enjoyed by the teachers and Officers ; the drawing of books from the Mercantile Library of New York City, in which the Institution holds twenty-three shares, on which the same number of books can be taken out at one time. The main body of pupils have a library of their own in the school building, from which they draw books every Friday, with the aid of their teachers. The already extended limits of this paper will not permit a more minute description of our system of book delivery, but any teacher who would like to look over the books, periodicals and newspapers set aside especially for the use of our pupils will be afforded every facility for inspection, and either Prof. Currier or myself will add any information in this line that may be desired.

THE CHAIRMAN : Next is "Reading Charts," by Mr. D. R. Tillinghast, of North Carolina.

READING CHARTS.

By David R. Tillinghast, of the North Carolina Institution.

The great importance of having reading taught to deaf-mutes, and a taste for it created in their minds is universally acknowledged, but, I fear, is too little appreciated in practice. Hence, there is now no need for remarking at length upon the importance, but rather upon the method of attaining this much desired end. Many plans have been devised and brought forward, but when put in practice, have failed to accomplish what was claimed for them. In every case it has proved uphill work.

Dr. A. G. Bell's theory of "having a deaf child read books in order to learn language, instead of learning language to read books," seems fine and plausible, but, in my opinion, it can not stand the test of practice in a classroom. The power of reading even the simplest books, presupposes such a development from the original condition of his mind and such a knowledge of language as the deaf child never possesses until he has been taught several years with great skill and industry.

Dr. Bell argues thus : The hearing child learns language by hearing it constantly repeated around him ; therefore, the deaf child, using eyes instead of ears, may learn language by constantly reading it as written in books. Arguing from analogy is often fallacious, however. Such an argument is only true when the analogy holds good in every essential particular between the two things compared.

In the first place, Dr. Bell forgets how extremely simple and elementary is the language which a hearing child under four years of age first learns and uses ; how from "papa" and "mamma," he passes to sentences of two and three words, those words being names of the simplest concrete things around him and of the simplest actions. No language in print can be found so elementary as this. Again, that language which the hearing child first learns has reference always to objects, actions, or events that are taking place before his own eyes, and these, therefore, explain to him the meaning of the language used. Besides this, the hearing child has the advantage of the infinite variety in tone and expression which always accompanies spoken language, and which always goes far to explain its meaning, and to further impress it on his memory. Compare the language that falls on the ear of a hearing child in the nursery, in the mother's room, at the table, on the playground, in beautiful walks through woods and fields under an infinite variety of circumstances, with that in cold print devoid of tone and expression, and impossible to be immediately applied in concrete form to surrounding objects. Where is the book so simple in the subject it treats and the language it uses, that the deaf child can see those of the objects and actions spoken of, while sitting at his desk within the four walls of a schoolroom ?

Is it possible for a deaf child to learn the real meaning of language by merely looking (not reading) at printed words, without ever seeing the many and various images expressed by them? To give a deaf child, who knows nothing of language, even the simplest of books now printed, and expect him to learn language by constant repetition of looking over the printed words, phrases and clauses, that call up before his mind no real images and that are mere symbols for what he cannot see, is to give an unweaned baby the food of a half-grown child, yet expect the baby to digest it and thrive on it as the older child does.

But it is asked, if "the deaf child *must acquire imperfectly*, after years of labor, a language which is mastered by the hearing infant before he is four years of age, and which foreigners, commencing at the age at which the deaf child begins school, acquire in a few months?" My experience and observation both as pupil, and later as teacher, compel me to believe that such is really the fact. In the acquisition of language by the deaf, I cannot believe that there is any possible plan by which reading can be made to "perform the function that hearing does for the ordinary child."

Dr. Bell thinks the deaf child ought to learn English by having a book before him and constantly striving to read, just as he himself learned to read Spanish. He forgets, however, that when he was learning to read, he did not have the undeveloped and infantile mind, with which the deaf child begins the study of English. Moreover, in already understanding and having control of a language as difficult as the English, he had an advantage over deaf-mutes which is beyond estimation. He had already learned how language is the symbolizing of all ideas, both abstract and concrete, and had become accustomed to noticing and distinguishing the thousands of subtle distinctions in the meaning and use of that vast collection of symbols called "words."

To learn the first language is to climb, with many a back-slip and fall, the steep mountain side, while to pass from that to the second language is but to walk with some weariness and difficulty up a moderately steep hillside. Moreover, in walking up the hillside, you have already had the hard but beneficial training and developing of every muscle, by climbing the mountain side. Dr. Bell expects the deaf child to climb the mountain side as quickly and as easily as he himself walked up the hillside.

I agree with Dr. Bell, however, as to the importance of reading for a regular school exercise in the learning of language. But I would urge that the pupils should be assisted at the same time, by means of action writing, pictures and pantomime, to understand the meaning of the words on the printed page before them. In this way, the conditions under which the deaf child has to learn the language, will be made as near as possible to those under which the hearing child does the same. Through means of pantomime and picture, the deaf-mute is made to see the connection between language and the ideas it represents, just as in the varied circumstances of life, the hearing child is made to see the connection between the spoken words he hears and the objects and actions that he sees before him.

Suppose a teacher, having selected two pupils, who seem to have no taste for reading, should cause them to sit by him, one on each side,

and have them read regularly a page or two from some suitable and interesting book, requiring each alternately to give the meaning in signs of every sentence. Suppose he keep this up for several years with the same pupil, what would be the result? With perhaps but few exceptions, I think it would always give them a good control of the language, and by thus making the great medium through which one mind talks to another, clear and transparent, it would, at the same time, create a thirst for wider knowledge and give them the means of acquiring it. It would, I think, result in piercing, for a little way, through that terrible wall of darkness that surrounds the undeveloped mind of the deaf-mute, and discourages his every effort to get beyond it into the broad light of human knowledge. That wall once pierced and the light from beyond once let in to the benighted mind, longing as it does for a wider sphere, and seeking continually a better understanding, I believe that few would fail to begin striving for themselves to get more and more light, and to become eager for that knowledge which is so easily to be obtained in this modern day of books, if only one can read them. But now the question would naturally arise, "What is to become of all the other pupils of your class?" We have come now to the question, to answer which this paper was written and I hope to answer it in a satisfactory manner. In place of books, I suggest the use of reading charts of a suitable size, on which specially selected reading matter has been printed in black type, large enough to be readily read at a distance of twenty feet. By means of these charts, I could place before a class of twenty or more, interesting stories or passages taken from various books, and require them to translate these, sentence by sentence, each pupil taking a sentence. The object of this constant and careful translation is to make certain that the pupil does not mistake the meaning of any word or sentence, just as a teacher of German would have his pupils translate German stories and passages into English for the same reason. It lessens the danger of the pupil's losing his interest, if he is made to see everything clearly in this way.

I would give only such assistance as was absolutely necessary to the understanding of the language. Such work would probably be looked forward to eagerly, as the most interesting part of the school work, because no loss of time and no expenditure of strength would occur, as is the case when reading matter must be laboriously copied on the blackboard, and because the pupil's interest, once awakened, would continue, not being interrupted by the idiomatic difficulties.

The great trouble is the question where such charts as would answer our purpose can be obtained. I, accordingly, move that this convention appoint a committee from the ablest and most experienced of our profession, which committee shall have, as their especial business, the preparing of the charts in the right form, and having them published. Pictures, specially prepared to illustrate some of the charts, and to aid in other school work, may be gotten up, I am confident, at such prices as will enable any institution to procure an abundance of them.

I might make further suggestions as to the kind of reading matter that should be chosen and the manner of its preparation, but, for the present, I will close, hoping that the convention will approve my mo-

tion, and that practical good will result from its adoption. It is my earnest desire to see, at the earliest possible moment, the deaf-mutes of this widely extended nation, and of all other nations, as thoroughly educated as faithful teaching through the best methods can accomplish, and if, by the suggestion I have just made, I have done something toward improving and advancing our present methods of teaching them, I have attained my end and shall be well satisfied.

As the pure, life-giving water from a great reservoir should flow, uninterrupted and uncontaminated, into every house of a large city, so influences, good and pure, should flow from this convention to every school for the deaf in this country and Canada, improving its methods and elevating its standard.

[Immediately after concluding his paper, Mr. Tillinghast addressed the convention as follows :]

MR. TILLINGHAST : I accordingly move that the convention appoint a committee from the ablest and most experienced of our profession, which committee shall have, as their especial business, the preparing of the reading charts, suggested in my paper, in the right form, and having them published.

Pictures especially prepared to illustrate some of the charts, and to aid in other school work should also be arranged for.

THE CHAIRMAN : The motion is not in order on this occasion. This is a Normal session, not a Business session. The motion will be in order to-morrow afternoon. A paper has been prepared by Prof. T. F. Moseley, of the Nebraska Institution, upon "Forming Habits of Reading." It will not now be read, but will be published in regular order in the Report of the Convention. We have a few moments left for discussion.

FORMING HABITS OF READING.

By T. F. Moseley, of the Nebraska Institution.

The difficulty of inculcating the habit of reading is not insurmountable. Skillful, intelligent teachers are devoting careful thought and earnest effort, and ways will be discovered to lead our pupils into such an acquaintance with printed language as to admit them into the enjoyment of literature. But as yet much remains to be done before we can feel satisfied with our labor in this direction.

Courses of reading for the term, class exercises, printed lessons, daily papers and innumerable other plans have been devised, many of them full of excellence and none of them without some merit.

It will hardly be claimed that any one plan is, in every particular, absolutely the best. Each teacher will select some definite system, which in his judgment is adapted to his own class, and will apply it in the schoolroom.

Admitting that the plans are all good and the work earnest, it will remain true that, while some pupils may accomplish as much as could be expected, few of them will become great readers.

May not the reason for our partial failure be found in the fact that no rule or system can be practiced that will be effective upon each individual pupil?

The following propositions are submitted, *viz.*:

I. No one subject will interest every child; nor will any subject interest a child at all times.

II. Every child is sometimes, and no child is always, in a state of mind to be interested.

III. The child who is not interested in what he reads, will not voluntarily read; and if he do not voluntarily read, he will fail to become an habitual reader.

IV. A child cannot be forced to like reading.

If a course of reading be established for the term, each pupil will read, say, forty sketches; but, according to the first proposition, not all the subjects will be interesting to every member of the class. Perhaps the majority will be pleased, but to a certain per cent of the class, the exercises will be distasteful, and just so far those exercises will have failed to accomplish their purpose. In the full course of the term, every pupil will have failed of interest in some few subjects, and probably a few pupils will have failed of interest in nearly all. Much good will have been done by the course of reading, but at best, only partial success can be claimed.

Apply the work to a single day. A teacher successfully selects subjects interesting to each particular child and appoints one hour to read.

According to the second proposition, some of the pupils will be in a frame of mind to read, when the hour arrives; but some will be in a disposition to do any thing but read. Here, too, we have accomplished much, but partial failure stares us in the face.

Whether the pupils like it or not, let us have reading lessons, day after day. Some of the pupils will yield at last and read from force of habit. Good! But some will not, and there we have it again, partial failure! For those who have not learned to enjoy the exercise will not voluntarily continue it. And by proposition three, such will not form a reading habit.

It would seem to be true then, that in spite of the most careful application of the best of plans, many of our pupils would arrive at the end of their school life unable to derive more than the most meager enjoyment from the perusal of books or newspapers; and such a conclusion accords with the facts.

But if plans and systems, and regular exercises fail, irregular, special exercises need not. Possibly, completed success may be achieved by supplementing the work done through regular methods by the utmost careful attention to those pupils who are not reached by the usual means.

Spread the general system, like a net, under the whole school and catch as many as possible. Apply a good plan to the work of each schoolroom and rejoice in all who are satisfied in that way. There may be schools where whole classes are successfully treated in that manner. All such are eliminated from our problem. On the other hand, there are good teachers, who know that the majority of the deaf in the schools are non-readers. And they are the ones to receive our special attention.

In dealing with these, all the peculiarities of temperament, personal habits, likes and dislikes, home and school influences, must be recognized and utilized. So must all kinds of printed matter. Nothing is to be despised that will interest the child for a moment or for a day. Library books and verses from the Bible are good. But, to catch the eye and fasten attention, they are often less available than word games at cards, circus posters, hand bills, illustrated catalogues of whatever may interest a child, papers from home, advertisements, business cards, letter heads, or even the signs on fence boards. Better read "blood and thunder" stories and society novels than nothing. Better a perverted imagination than none.

Pupils may be inveigled into reading. O'Brian never was a reader, but he frequently appeared with a button-hole bouquet, purchased from a neighboring florist. The hint was taken, Vick's Catalogue was placed in his hand. He found his favorite flower, learned its name, sought for other flowers which he knew and tried to learn about them. No further trouble with O'Brian. He can be led on indefinitely, and will never know how he first learned to take an interest in a book.

A class enters the school room at 7:55. At that moment a passenger train rounds a curve into view from the schoolroom window. Boggs' eyes sparkle, and he says in signs "Time exact! Cars exact! Always prompt! Funny cars! Through all countries! Come, go, pass! Fields and cities! People meet, happy! People separate, sad! Toward home, smile! Away from home, long face! I see them at depot. Interesting cars!" *Alia*, there's a cue!

Boggs strangely found various pieces of railway literature in his way. The bait was right. In a few days he brought to his teacher a notice of a proposed line from Montana to Alaska. Questions were asked, the cost and profits discussed. Boggs was intensely interested in the road, but best of all he had incidentally discovered that he could read of such things for himself. But Boggs says that the reading hour is "dry"!

Archie's brother removed to Dakota. Archie asked questions about that country. The teacher excused himself from talking, but gave the boy some written description of that State. Archie is a poor reader, but he read columns of boom literature on the productive soil and the genial climate in the Dakotan paradise.

Fred was a crank on chickens. By reading poultry journals, he was led to other periodicals, till he wrote home for the family religious papers. Was it a coincidence that his mother sent him Methodist Advocates? From the Advocates, it was but a step to the "Great Religious Dailies," and Fred has become a general reader.

Pupils can be *inveigled* into reading. Inveigled is the word. Can be led blindly into doing things they never would do if they knew it was required. There is a book, entitled "The Boy's Own Book," full of descriptions of knots, snares, and nets; how to make kites, traps, and boats; to skin animals and preserve bugs. Boys who hate the reading-room, and would not touch a library book, will struggle for hours with the language of this book. And as a reading exercise it is as good as any. They do manage to understand it and make the things described, which gives them confidence in their ability to enjoy books. It is only a step from the tricks here described to the life of some great

The whole family of pupils might be divided up, somewhat after the manner of classes in the Methodist Church ; and a leader provided for a small number of pupils to watch over and help ; not exactly to associate with, but to know intimately, and to do for each child what the supervisor would, but can not.

Every teacher and officer who lives at the institute should be available as leader of such a group, and be interested in at least a few individuals. The older children of families at the Institute could make themselves useful letting their light shine. Somebody's light should fall on every pupil.

We should all be secretly conspiring to tempt, to allure, to entice the unwary pupil into an acquaintance with all forms of printed matter, to the end that he may become a reader without knowing it.

DR. BELL : Allow me to direct your attention to a slight error in Mr. Tillinghast's paper, but an important one. Mr. Tillinghast speaks of the simple language and the simple words employed by a little hearing child, when he first comes to use our language ; but he has forgotten that before that child uttered his first word *he understood the language* ; and indeed that wherever languages are naturally acquired, comprehension of the language precedes the attempt to express ideas in that language. The little hearing child, before he lisps his first "papa" or "mamma," understands the language. *Comprehension always precedes expression*. Hearing children understand the language before they use it ; but we try to make deaf children use the language before they understand it. If you want to teach language to the deaf, go and study the way in which languages are taught to the hearing. Don't go to the learned professor of Harvard or Yale. Go to the fond mother, and the prattling nurse, and learn of them. They don't ask their children to speak or use the language before they comprehend it.

MR. WESTON JENKINS, of New Jersey : How about reading before they comprehend it ?

DR. BELL : That is different—for they are then taking in language, not giving it out ; and certainly deaf children must see the language before they comprehend it, just as hearing children hear it. Go to the nursery of the hearing child, and study there. Whatever the mother or nurse does to the ears of the hearing child, do *you* to the eyes of the deaf child.

MR. WESTON JENKINS : Did you ever know a deaf-mute to use a word before he knew what the word was ?

DR. BELL : Certainly.

MR. WESTON JENKINS : Did you ever know him to use an expression before he knew what the words meant ?

DR. BELL : Yes, I have—both words and idiomatic expressions.

MR. WESTON JENKINS : What I mean is this : that a child will repeat language before he understands it.

DR. BELL : Certainly, that is so. The same thing happens with the deaf child that we see every day with our hearing children. They use words and expressions (picked up by imitation) that they do not understand ; but in time they come to understand them, and to use

them correctly. Children learn language by imitation; and if you want a deaf child to learn a language by imitation, you must present it to him first before he knows it. He must *see* the language used as others hear it. He must see it without understanding it at first. He must see it—often repeated—in order to understand it. It is just here, at the commencement of education, that books and reading-matter become of importance, by supplying the teacher in ready-made form with an endless variety of words and sentences, addressed to the eye. The deaf child can obtain, from the perusal of books, an enormously greater repetition of unknown words to the eye than the teacher could possibly give him in any other way. The personal efforts of the teacher should, therefore, be supplemented by the reading of books in the very earliest stages. Use, yourself with your pupils, the language you would teach, and let them also see it used in books. Nature and imitation will do the rest. Expression by language will follow of itself, for deaf children, like the hearing, will try to use with you that language you employ with them. Then comes composition, and the improvement of expression. At the present time, expression by language is forced into existence prematurely, before the children understand language addressed to them.

MR. J. W. SWILER, of Wisconsin: It seems to me that Dr. Bell, in talking about the question of Books and Reading, in the advice that he presents to us, saying that we had better go to the mothers of the children and learn how to teach them words, has overlooked the fact that the mothers make the confession to us, as many here will confirm, that they have been unable to teach the children. They say, "Had I known how to do that, had I known that method of teaching the meaning of these words, I could have done much with my child at home, but I did not know how to do it." Mothers and the teachers in primary schools can come to our schools in Wisconsin as in other States, and may learn from the methods of instruction in those schools how best to teach the primary forms of language.

In regard to the importance of reading, I consider it of very great importance. I think we have not always given it the attention that we should. I believe we should have reading classes in all our schools, that we should have a time allotted for reading as other children have; that is, that they should read for a certain number of minutes in something with which they are familiar, and be questioned, so that they shall acquire the habit of thinking upon and knowing those things which all well-informed men know and need to know. In this connection, there has recently appeared in a certain journal, *Public Opinion*, a proposition to introduce current topics into the public schools. A prize was offered for essays on the subject, and three very fine ones were selected and published. These all urge the introduction of reading and a study of the current topics in society, in politics, in science and in art, into our public schools. If it be true, as I believe it is, that the young people of our schools are not well informed in regard to the great current topics of the day, I believe it is still more eminently true of our deaf children, and I believe that it is important that they should give more attention to reading than it has had before.

DR. PEET : It seems to me that the real object of Mr. Tillinghast's paper is to indicate the best way of teaching a deaf child how to read books, so that he shall not merely recognize letters or words, but shall grasp the meaning and the force of each entire sentence. To this end, he suggests exercises that shall enable the pupil to give to alphabetic forms the significance that comes from attaching to them severally and as a whole, their equivalents in signs, which, in their nature spontaneous and acquired without effort, to the deaf-mute perform the same functions as the sounds into which the same forms are transmuted perform for the hearing.

Mr. Tillinghast's method is similar to that which was pursued in his own education.

I once had a class of pupils to each one of whom I gave a copy of one of those charmingly delineated lives prepared by the brothers Abbott, which have done so much to interest young persons in the leading characters of the World's history, each of the books distributed among them describing a different personage.

I required these pupils to tell me in signs in the presence of the others the gist of what they read from day to day, and most of them gave very lucid and even graphic expositions of what they had gone over. That was the way in which I gave Mr. Tillinghast, who was a member of the class, ability to read with pleasure and profit, and such was his proficiency, that, during one of his vacations, he read all the Waverley Novels by Sir Walter Scott, from beginning to end.

MR. F. M. GORDON, of Georgia : I want to ask one question of Dr. Bell : Do I understand you to say a deaf-mute child should be taught to read from the lips before learning to write ?

DR. BELL : No, sir. My opinion is that with the congenitally deaf it is better to teach written language first.

MR. GORDON : I think mothers and nurses are the first ones from whom a child begins to learn language.

DR. BELL : I alluded to hearing children. I meant, to take a lesson from the nursery of the hearing child, to note what mothers and nurses do with hearing children and apply the lesson to the deaf.

MR. GORDON : I understood you to say that a deaf-mute child should be taught to speak before learning to write.

MR. W. G. JENKINS, of Hartford : I am unwilling that the statement, "Comprehension precedes expression" in the natural order of language should be left in that bald way. To call the first attempts of a hearing child to use language, an act of comprehension, is to credit it with intellectual power of a very high order. The acquisition of language by a child, is not a logical process. Language comes to a child intuitively, by a process of imitation, by spontaneous, mechanical repetitions of what has been already heard. There is no analogy between this process and the education of a child in a language it has never had the privilege of hearing.

Of the objection to presenting a story in signs to be written in English, I wish to say, that if any one would give me a story in English, and require me to write it in Latin, you would soon discover my weakness in that tongue. It would be such miserable stuff, that

no one would care to read it. The most severe test that any pupils can be subjected to, is to require them to write an extempore composition in a foreign language. If they do that well, there is no question of their proficiency. Now, this is just what we do. We present an incident of every-day life to our pupils in their vernacular, and require them to reproduce it in English. Is not this a fair statement of the case? (A member: That is all there is to it.)

If our pupils can fulfill this most rigid of all tests, and clothe their thoughts in readable English, we have every reason to be satisfied with our work. Take courage, gentlemen.

[It is to be regretted that the stenographer failed to record the very interesting and animated discussion between Doctors Bell and Williams, which followed the remarks of Prof. W. G. Jenkins, bearing upon the subject of Reading.—SEC'R.]

THE CHAIRMAN: Our next paper will be upon the "Educational Value of the Printing Office," by Mr. Samuel G. Davidson, of the Pennsylvania Institution.

EDUCATIONAL VALUE OF THE INSTITUTION PRINTING OFFICE.

By S. G. Davidson, of the Pennsylvania Institution.

Printing is now taught in almost all of our schools, and is generally conceded to be one of the trades best adapted to the deaf. But in considering it as a trade merely, and as such relegating it to the plane of shoemaking, carpentry and other purely manual occupations, its value as an adjunct of the educational, or, more properly speaking, intellectual department, appears to be slightly regarded, if not entirely lost sight of. What I wish to submit in this brief paper, is that the printing office of our institutions should rank with the schoolroom, not with the shops, and the person in charge with the teachers, not with the foremen in the trades department; that by according the office this position, its usefulness as a trade school would be enhanced, and it would acquire a new value as one of the most effective means of instruction in the intellectual branches.

The most important and most difficult task of our schools, is to give their pupils a command of the English language. Now, language is everything in a printing office. It is at once the most important tool and the end of all the work done there. Without it the type, sticks and presses, are but so much useless metal. The types when properly marshalled into line make language; the sticks are but handles by which to hold it while it is being made; and the press merely transfers it to paper. During the time he spends in the office, the pupil is working in language as the potter works in his clay, or the baker in his dough. Under the worst of instruction, or without any instruction beyond what the work of type-setting and galley-correcting affords, he will pick up considerable knowledge of its structure, and be enabled to use it with greater facility than he could if never placed at the cases. Where there is a man in charge of the office who, in addition to the

technical knowledge that belongs to the trade, possesses the education and the ability to teach, required of those employed in the intellectual department, and who, recognizing the fact that the pupil's progress as a workman can only keep pace with his improvement in language and the growth of his stock of general information, is not content to wait upon the instruction given in the schoolroom ; but himself takes pains to instruct and explain as the pupil proceeds with his work, the growth of the child in language and intelligence, will be very marked, and his efficiency as a compositor greatly increased.

The aim in the Philadelphia Institution is to admit pupils to the class in printing as early as possible in their school course, and to grade them according to their knowledge of language. Suppose a boy, who has been in school two or three years, is taken into the class. As soon as he has mastered the first principles of type-setting from working on reprint copy, he is given work to do from easy manuscript, putting in type "Our Little World," the daily paper published by the Institution, and the lessons, all the copy for which is prepared by the teachers and is generally clearly written, while the language is but little more difficult than that used in the schoolroom. The copy is at first carefully read, and corrected if necessary, but gradually the child is brought to depend upon himself until he is finally able to correct, without assistance, the ordinary slips in grammar, punctuation, spelling, etc., that may occur in such simple manuscripts. When his proofs are submitted, they are not simply read over and the corrections indicated. The pupil has the errors pointed out to him, and is required to correct them himself, if possible. He will be able to do so, if he understands the language of the copy and made the mistakes through carelessness. If he is unable to supply the correction, it is evident that he does not understand, and the mistake is as carefully explained as it would be in the schoolroom.

Gradually the pupil is advanced to more and more difficult copy, the process of instruction and explanation being continued, the end that is kept in view being to make it possible for him to take the worst manuscript that comes to the office and, without assistance, put it into type in good, readable English, perfect in sense, grammar, punctuation and spelling.

In a short time the process of lifting type into the stick becomes purely mechanical, and the pupil is able to give his whole mind to the copy he is working on. He soon learns that he can work faster by committing a line or short sentence to memory than by following it word for word. The language passes slowly through his mind as he puts it in type ; he sees it gradually growing under his hand into lines of metal ; before emptying the filled stick, he is required to compare it with his memory of the copy, or if memory fails, with the copy itself, and to correct any mistakes he may perceive ; he again revises his impressions of the language when it is presented to him in the form of a proof ; has it constantly before his eyes while correcting his galley, and, finally, has it to preserve in its corrected and permanent form as book, newspaper, or lesson leaf. Working thus, day after day, under careful direction, surely the pupil's knowledge of language must grow apace.

One of the advantages of this method of instruction is that the

language acquired under it will be perfectly natural, and free from the stiltedness of the schoolroom phraseology and the deaf-muteisms that are the result of imperfectly assimilated knowledge imparted in the usual manner. It is the true natural method, and is nearly akin to the plan recommended by Dr. A. Graham Bell, of requiring pupils to read in order to learn the language, but is superior thereto in that the pupil is obliged, by the necessities of his work, to make a definite effort to understand what he reads, to commit it to memory, if only for the brief time required to put it in type, and to review it frequently. The mechanical act of setting the type is itself calculated, from the slowness and precision with which it must be performed, to impress the language and the idea it expresses upon the pupil's memory.

The work in the printing office can be made to do much more than contribute to the pupil's progress in language. Many things in art, science, literature, politics, etc., with which he would never make acquaintance in the ordinary course of school-room study, are there brought to his attention, and with a properly qualified instructor in charge, who will encourage questions, and explain and enlarge upon the topic, or, better still, place in the hands of the pupil the book or papers that will make it clear to him, the child's growth in intelligence and general information will be very rapid. Even as regards arithmetic, there could be no more helpful exercise than the composition of tables, the operation requiring the intelligent use of the fundamental principles of the science of numbers, and the correctness of the work being self-evident to the pupil upon its completion.

A fact learned indirectly will be more firmly established in the mind than one directly committed to memory, owing to its association with the act or incident that brought it to the pupils' attention. For instance, in the proof of one of my pupil's work, I once found the following sentence, "*Charles King's leg was a celebrated English Clergyman.*" His attention was called to its absurdity, and he was required to correct it without referring to the copy. As he was unable to do this, he was referred to the encyclopædia to find the name of a celebrated English clergyman, whose first name was Charles and whose second name began with Kings. It did not take the boy long to discover that "Charles King's leg," should have been Charles Kingsley. He was required to tell what Kingsley was celebrated for, "so I might be quite sure he was the man." The result of the few minutes thus spent, was that the boy learned a great deal about that famous Englishman, and the association of the facts with the absurd error he had made, served to fix them indelibly upon his memory.

Ordinarily, the pupils taken into the printing office are selected for their intelligence and knowledge of language; but among those in my office have been a number who were originally accounted dull and backward, and who were admitted to the class merely to test the educational value of the work. The results have been extremely gratifying, and in some cases astonishing. One boy, who, after several months' trial, was rejected as incapable of improvement, and three times dismissed from the class, but as often reinstated at his urgent request, was finally allowed to remain as an extreme case, and received special attention and instruction on the plan I have outlined. He ultimately became one of the best compositors in the office, took

the lead in his classes in the schoolroom, and is now earning his living by working on a daily paper. This is not a solitary instance; many boys, but little more promising, have since been admitted to the class, and have turned out equally well.

It is contended by some that deaf-mutes cannot become good compositors, and that only semi-mutes should be taught the trade. In my office, over three-fourths of the pupils, excluding those from the Branch for Oral Instruction, are deaf-mutes. Their improvement in language has been more marked than that of the semi-mutes, and it has been demonstrated that under the system of instruction followed they are just as capable as the latter of becoming good printers. It is worthy of remark that the leaders of three classes in the National Deaf-Mute College are graduates of the Pennsylvania Institution, that these three young men each spent several years in the printing office connected with the Institution, and that two of them are congenital mutes. From one of them I have received a letter, in which he acknowledges his indebtedness to the office for much of his success in the college.

I have not attempted to discuss in this paper the manner in which purely technical instruction is imparted. Neither have I gone deeply into the methods made use of in teaching language or other branches in connection with the work. The method must always depend upon the occasion, and upon the person it is desired to instruct. What I have tried to show is that the printing office, which has been called the poor boy's college, can be made a schoolroom for the deaf boy, wherein he can be taught not only a handicraft by which he may earn his living, but many things that go to make a scholar, and that as, in this particular trade, the former instruction depends upon the latter, the latter should be considered most important, and the department should be ranked accordingly.

To thus combine the functions of the intellectual and the industrial teacher is a difficult task, that is likely to be shirked where it is not required by those in authority, and if their appreciation of its value is not indicated by adequate compensation for the double work performed. The truest economy consists in making the best possible use of all means at command for the improvement of our pupils, and this end would be well served by placing a capable man in the printing office, properly defining his duties as a teacher, and remunerating him according to the work he is required to do, and the qualities he brings to its performance.

THE CHAIRMAN: Our next is a paper upon "Electrical Transmission," by Prof. S. T. Walker, of Kansas.

MR. S. T. WALKER: We are all aware that the time has arrived for us to go to bed, and any time that there may be remaining to this already long extended session, should be given to the discussion of the last paper. So that I respectfully withdraw my paper.

DR. PEET: I would like to have Mr. Walker read a few sentences of his paper in order that we might get an idea of his purpose in writing it, and then we shall have the opportunity of reading it over at leisure. I would make the suggestion that this might be done

with other papers, and thus the convention might be the means of bringing together in one volume a great deal of valuable literature.

MR. WALKER : I thank Dr. Peet for his suggestion, but I feel that it is unwise to read even a little, and I must beg leave to withdraw the paper.

THE CHAIRMAN : Mr. Walker, having withdrawn his paper, a few moments will be allowed for the discussion of Mr. Davidson's.

MR. HODGSON, of New York : The deaf and dumb find in the printing office, work that at the very outset requires concentration of mind. Besides the acquisition of grammatical language, they learn very much concerning commercial and business forms, such as is used in bill-heads, receipts, business cards, announcements, etc., which they necessarily come across in their work in setting type. They use the head, the eyes, the arms and fingers—in fact, all parts of the body. It is both a physical and a mental training school, and the teachers tell me that the type-setting has improved the scholarship of the students. Printing differs from other trades, in that each day there is something new to work upon, something new to be absorbed by the attentive mind, and the stock of varied knowledge is thereby daily increased. The erroneous impression that the art of type-setting is merely mechanical needs to be corrected. The truth of the matter is, that it is as difficult to train a deaf-mute printing-office apprentice as to teach a pupil in the classroom.

At the conclusion of Mr. Hodgson's remarks, the session was, upon motion, adjourned until 9 o'clock A.M.

FIFTH DAY.

WEDNESDAY MORNING, AUGUST 27.

The Normal Session was called to order at nine o'clock, by Dr. G. O. Fay, Chairman of this department of the convention, who announced that the first paper of the day would be read by Prof. John P. Walker, of the Pennsylvania Institution.

MR. J. P. WALKER : To read the paper which I have prepared, will exceed the limit of time allowed, which the Chairman informs me will be fifteen minutes at the outside. In this time, I do not feel that I can give you even a *resume* of it. My disposition was simply to submit it, and have those who desire to, if there is anything interesting in it, get it from the published report of the proceedings ; but your Chairman desires me to occupy the *interim* before the arrival of Mr. W. G. Jenkins, and I will do so.

THE INTERROGATIVE.

By John P. Walker, of the Pennsylvania Institution.

To an astrologer, who, by a blunder,
Fell in a well, said one, " You addle-head,
Blind half an inch before your nose, I wonder,
How you can read the planets overhead."

—LA FONTAINE.

It is with no little pride that American educators of the Deaf turn

from a perusal of the proceedings of the Conference held in the French capital during the past year. The minutes of its sessions disclose to us that among the most valuable papers there presented, of the brilliant arguments there made, of the resolutions there passed, of the committee business there transacted, the work of the members from our States stands in the very forefront. If valuable results indicate proper means, if a tree is at all known by its fruits, the splendid labors of our American representatives should be most gratifying to us.

In the light of all the achievements of this conference, and regarding the present condition of the deaf in all civilized communities, it may seem a trifle pessimistic, perhaps, to speak of glaring defects in the tuition and nurture of those for whose weal we are striving, and from among whom the members of this conference came, or to point with anything but pride to the educational methods of to-day; and, yet, that there are defects in these methods is undoubted. A century ago, it was thought that the full education of the deaf was *un fait accompli*. We now look back, with pitying eye, upon the crude facilities and worse means of those engaged in the work at the time. A century hence instructors of the deaf will doubtless look back upon us as benighted and our work as aimless and inchoate. We have kept abreast of the age of the steam-engine and the telegraph, and we will, just as surely, advance *pari passu* with the age of the electric-light, the telephone, the phonograph, and the other miraculous discoveries of the age to come.

The elimination of improper subjects from our schools, the careful grading of the classes, the adoption of courses of study, the closer supervision of work by the principals and directors, the increase of periodicals for the dissemination of all new ideas relative to instruction, the establishment of well-organized and conducted "teachers' meetings" in all of our schools and of "literary societies" among our pupils, the publication of daily and weekly papers for the discussion of methods and spread of knowledge among the deaf, and the great additional attention paid to the trades, all mark an era of the greatest advancement with us.

There are yet, however, unopened avenues to the brain of the persons whose ears are stopped, and, yet, opened ways that are not trod enough. It is to one of these latter that I would refer in the little space allotted me in these deliberations.

I can yet remember the feelings of wonderment I experienced in my early association with the class entrusted to our care, at the way which they used colloquial language, at their stilted forms, the absence of the common and customary idioms, the unnaturalness of their diction, and the strangeness of their phraseology, even that of the most advanced of them, and to this day, the wonder has grown until I have been forced to the conclusion that either this form possesses insuperable obstacles for them, or else that we do not include enough of it in our instruction.

The brain-matter of our pupils is the same as ours, their mental capacity the same, their ability to grasp even the most intricate forms of speech and most abstruse ideas, unconfined by any barrier not restricting our own mental vision, and my conviction to-day is that it is our

own neglect that surrounds us with graduates from our highest classes who are quite unable to carry on, with any credit, a conversation upon even the most familiar subject.

The origin of language, like the origin of the species, is enveloped in much obscurity. That communication began in a few simple sounds, supplemented by many signs, is undoubted, and that language was an evolution from these, we do not question. Just when words became language it would probably be hard to determine, even if we could follow the growth, it was so gradual; but, from our knowledge of the uses of man for it, we would be free to assume that the very first form it took was the simple interrogative one. As language is a development from words, so conversation, the highest and most important use of language, came long after the early interrogatives. That this conversation, which is so simple and the source of such infinite pleasure to us, and that has almost risen to the dignity of an art among us, should be so stilted and laborious to the average deaf-mute, can be but because of a defect, and that a most glaring defect, in their education.

Not long since, I started a series of conversational lessons intended to give the colloquialisms and technology of a variety of every-day situations, which I thought might be valuable as an aside from our usual work. I felt, at entering upon them, that the section already had a good use of such language, but that there must arise some expressions new to them, and that they would embody many words with which my pupils were not familiar. It did not take me long to conclude that, with this advanced class, it would be well to use the lessons as our "usual work," and the "usual work" for an aside.

The lessons I taught in this way: I would suppose circumstances, introduce *propria persona*, set them to talking and acting, and have my pupils write the conversation as it occurred.

In the first exercise, which was upon "shopping," I supposed a girl, whom I called "Belle," to be in the sitting-room, sewing, and another, whom I called "Annie," to approach, and then had the following conversation take place:

Annie.—I am going shopping. Won't you go along?

Belle.—I am very sorry, but I can't possibly, as I want to finish my dress.

A.—How long will it take you to finish it?

B.—It will take me about an hour.

A.—If I wait for you, will you go with me?

B.—Yes; I will go with pleasure, if you will wait until I finish it.

(*A.* goes away and returns in an hour.)

A.—Are you through?

B.—Yes; I am done now, and will go up right away and get my things on.

(*B.* soon returns.)

A.—Are you ready?

B.—Yes; come along.

(They arrive at Wanamaker's.)

A.—I would like to get some dress-goods first, but I don't know where the dress-goods department is.

B.—I don't either. You had better ask a floor-walker.

A.—I will do so.

(They find a floor-walker.)

A. to F.—Will you please tell me where the dress-goods counter is?

F.—Certainly. Come this way, and I will show you.

(They go to the counter.)

A. to Salesman.—I would like to see some of your winter dress-goods.

S.—Do you wish silk, woolen, or cotton goods?

A.—Woolen goods.

S.—What colors do you prefer?

A.—I would like to see something in dark blue or brown, or some dark mixed goods.

(The salesman hands down several pieces.)

A. to B.—I don't like any of these, do you?

B.—No; I don't like them at all.

A. to S.—Please let me see some other patterns.

(S. shows several other pieces.)

A. to B.—I like that one very much, don't you?

B.—Yes; I think it is extremely pretty.

A.—I think I will take that.

B.—I would.

A. to S.—What is the price of that?

S.—It is twenty-eight cents a yard.

A.—I will take sixteen yards of it.

(S. cuts off sixteen yards and wraps it up.)

S.—That will be \$5.48.

A.—Let me see. Sixteen times twenty-eight is \$4.48, not \$5.48.

S.—Oh! That is so.

(A. gives him a \$10 bill, and he returns with \$4.92 in change.)

A.—That is not right. You have given me but \$4.92, and I ought to have \$5.52.

S.—I beg your pardon. The cashier has made a mistake.

(He gets the correct change.)

S.—That is right, now, I believe.

A.—Yes; that is right, now, I thank you.

S.—Will you take the goods with you, or shall I send them?

• A.—Send them please to—

“Annie Smith,

“Inst. for the Deaf,

“Broad and Pine Sts.”

A.—Now, let me see. Oh! yes, I want a pen-knife. (To S.) Will you please tell me where the cutlery counter is?

S.—You will find it just around there in the next aisle.

A.—Thank you.

(They go around to the cutlery-counter.)

A. to *S.*—Will you please let me see some of your pen-knives?

(*S.* produces a tray full of knives.)

S.—Do you wish a large knife or a small one?

A.—A small one.

S.—How many blades?

A.—I guess two will be enough.

S.—What kind of a handle do you prefer, tortoise shell, buckhorn, bone, pearl, or metal?

A.—I believe I like pearl the best.

B.—Pearl would be very apt to break, if you should drop it.

A.—That is so. I did not think of that. I guess buck-horn would be better. Let me see the buck-horn handled ones.

(*S.* shows her some.)

S.—Ladies don't often use buck-horn handled knives. They are rough and strong, and intended more for men. Tortoise-shell or pearl are much prettier, and ladies usually like them best. They are quite strong enough, I think.

A.—Is that so? Let me see the pearl; and shell ones then, please.

S.—That is a nice one, and it is very cheap, too—only 20 cents.

A.—Yes; that is real neat. Is it an imported or domestic knife?

S.—It was made in this country. If it were an imported one, it would cost you about fifty cents.

A.—You may give me that one.

S.—Is there anything else?

B.—Annie, your hat-pin is coming out.

A.—Oh, bother! that hat-pin is all the time coming out. I will lose it next.

B.—You had better stick it in from the top of your hat.

A.—That would look funny. Nobody wears them that way. I will leave it as it is, and if I lose it, I will be glad to get rid of the trouble it gives me.

B.—Is there anything else you want?

A.—Yes; I want several other things, but I will not have time to buy them now. It is getting late, and we must go home, or we will lose our supper.

(They start for home.)

A.—Wanamaker's is a very pleasant place to shop, isn't it?

B.—Very, indeed; but I think some of his goods are high.

A.—I guess he sells his things about as cheap as you can get them anywhere.

(They arrive at the Institution.)

B.—Oh, the girls are eating. We will have to hurry.

This conversation I gave in gesture, and you can imagine my feelings upon finding the first paper I picked up to read to this effect:

Annie.—I will go to buy some things. Will you go with me to buy some things?

Belle.—I am sorry. I cannot go with you to buy some things. I will sew my dress.

A.—How long will you sew your dress?

B.—I will sew my dress one hour.

A.—Will you go with me when you finish sew your dress?

B.—I will go with you when I finish sew my dress.

(*A.* goes away, and returns in an hour.)

A.—Are you done?

B.—Yes; I am done. I will put on my hat and my coat.

(*B.* soon returns.)

A.—Will you go to buy some things now?

B.—Yes; I will go to buy some things now.

(They arrive at Wanamaker's)

A.—I wish to buy some dress-cloth, but I don't know where dress-cloth is.

B.—I don't know. You must ask the man.

A.—I will ask the man.

(They find a floor-walker.)

A. to *F.*—Where do girls sell the dress-cloth?

F.—Yes; I will lead you to the girls sell the dress-cloth.

(They go to the counter.)

A. to *Salesman.*—I wish to see the dress-cloth for winter.

S.—Do you want to buy the silk dress-cloth or the wool dress-cloth or the cotton dress-cloth?

A.—I wish to see the wool dress-cloth.

S.—What color do you like the dress-cloth?

A.—I would like brown dress-cloth or blue dress-cloth or mixed dress-cloth.

(The salesman hands down several pieces.)

A. to *B.*—I don't like them. Do you like them?

B.—No, I don't like them.

A. to *S.*—I want to see some other dress-cloths.

(*S.* shows several other pieces.)

A. to *B.*—I like it. Do you like it?

B.—Yes, I think it is beautiful.

A.—I will buy it.

B.—It is good to buy.

A. to *S.*—How much money for one yard of the dress-cloth?

B.—Twenty-eight cents for one yard.

A.—I want to buy 16 yds.

(*S.* cuts off 16 yds., and wraps it up.)

S.—It will cost \$5.48.

A.—That is wrong. It will cost \$4.48.

S.—That is true.

(*A.* gives him a ten-dollar bill and he returns with \$4.92 in change.)

A.—That is not right. You must give to me \$5.52.

S.—Excuse me. The cashier was wrong.

(*S.* gets the right change.)

S.—That is right.

A.—Yes, it is right.

S.—Will you carry the dress-cloth to your home or will the boy carry the dress-cloth to your home?

A.—The boy must carry the dress-cloth.

“Annie Smith,” etc.

A.—I want to buy the pen-knife.

A. to *S.*—Will you please show to me where the pen-knife desk.

S.—There the pen-knife desk.

A.—Thank you.

(*A.* and *B.* go around to the cutlery counter.)

A. to *S.*—I wish to see the pen-knives.

(*S.* produces a tray full of knives.)

S.—Do you want a large knife or a small knife?

A.—I want to buy a small knife.

S.—How many blades do you want in your knife?

A.—I want two blades, enough.

S.—Do you want a turtle-back knife, a horn knife, a bone knife, a pearl knife, or a brass knife?

A.—I want the pearl knife.

B.—If you drop your pearl knife, you will break your pearl knife.

A.—It is true. The horn knife is best. I want the horn knife.

(*S.* shows her some.)

S.—Horn knives are not good for ladies. They are good for men. The turtle-back knife and the pearl knife are best for ladies.

A.—True. I want to see the turtle-back knife or the pearl knife.

S. (selecting one).—That knife is good, and not much money, 20 cents.

A.—Yes. It is nice. Is it an Europe knife or an America knife.

S.—It is an America knife. An Europe knife is 50 cents.

A.—I will buy the knife.

S.—Will you buy another knife?

A.—No, thank you.

B.—The big pin is losing.

A.—Oh! I don't like the hat-pin.

B.—You must pin the top hat.

A.—If I pin the top hat, it will be funny. Ladies do not pin the top hat.

(*A.* pushes the pin in again.)

B.—Do you want some other things?

A.—Yes, I want some other things, but it is late. We must go home. We will lose the supper.

(They start for home.)

A.—I like to buy the things in Wanamaker's.

B.—Yes, but some are costly things.

A.—I think many things are not costly.

(They arrive at the Institution.)

B.—The girls are eating the supper. We must run and get the supper.

The other members of the section turned in work, which was strik-

ingly similar and quite as infelicitous, and I confess I went about the correction of it with a heavy heart, with a feeling that such exercises were of the greatest importance and must needs be of the greatest benefit to them as an aid to what I may term naturalness in the use of the interrogative.

After correcting the class version of the above conversation and having my pupils look carefully over the corrections, I re-wrote the whole exercise, using such language as intelligent speaking persons would use, and had the section memorize it.

I followed the lesson on "shopping," by supposititious conversations occurring during a walk in the park, at a photographer's, while purchasing in a drug store, while buying a trunk, out rowing and fishing, at a dentist's, in consultation with a physician, and under a variety of other circumstances, each of which, you can readily understand, could be made to contain a vast deal of information as well as much in the way of daily colloquialism. When possible, I corrected their efforts under their eyes. When this was not possible, I corrected them at home, and returned the corrected copy for their perusal the following day; and, just here, we have brought before us another question that has been mooted among educators of the deaf. I have even heard able teachers say that they considered time spent in correction apart from one's pupils as simply time thrown away. My experience has been that such correction may be made profitable. To be sure, we always meet with the discouragement, when we do this, that such work will be passed over, with scarce a glance, by half one's class, but I have remedied this to a large extent by a simple device.

In correcting the papers of the class, I select the work of a uniformly careless pupil, and instead of correcting it properly, distort already correct language in such a manner that it must attract the attention of one who is conscientiously reviewing his work. The papers are then distributed for perusal, and after a sufficient time has elapsed, pupils are told to put them into their desks and go on with whatever work there may be to follow. The negligent one, if negligent upon this occasion, will put his work away with the rest, and then comes an opportunity for a reprimand before the class that may be made so vigorous, that it will be many a day before the offense will be repeated.

As one reads over the papers he receives, under the earlier tests, it really often seems that the only way to correct the utter unnaturalness and babyish stiffness of them, is to tear them up and re-write the matter in it entirely.

Not long since I asked an advanced class the question: "Am I your mother?" Some of them admitted that I was their mother, and some went so far as to say that they were my mother, while but four answered the question correctly. You may smile at this, perhaps, but we all overestimate the capabilities of our pupils, and a practical test will in nine cases out of ten, develop a melancholy state of affairs in the matter of this interrogative, a state of affairs that will be developed as well in an effort to carry on a conversation in writing or spelling with almost any deaf-mute of your acquaintance.

Do your pupils say, "The pencil you gave me a few days ago is worn out. Will you be kind enough to give me another?" or do they say, "I want a pencil." Do they say, "Will you please lend me your

knife?" or "Lend me the knife." Do they say, "Shall I shut the window?" or simply, "Shut the window," with a gesture to eke out the sentence. When they go to buy candy, do they say: "Give me five cents worth of candy," or "I want some candy for five cents." Do they use with facility such expressions as:

So do I.
 So can I.
 So am I.
 So would I.
 So do we.
 So did we.
 So can we.
 So are we.
 So will we.
 Neither do I.
 Neither can I.
 Neither am I.
 Neither would I.
 Neither do we.
 Neither did we.
 Neither can we.
 Neither are we.
 Neither will we.
 Neither would I.
 Neither would you.
 I don't, either.
 I can't, either.
 I am not, either.
 I wouldn't, either.
 We don't, either.
 We didn't, either.
 We can't, either.
 We are not, either.
 We won't, either.
 We wouldn't, either.
 You wouldn't, either.
 I have, too.
 I can, too.
 I shall, too.
 I am, too.
 I do, too.
 I did, too.
 I sha'n't, either.
 Is that so?
 You don't say so!
 Who told you so?
 Why not?
 Is it possible?
 Never mind!
 Of course.
 Yes, indeed!
 By-and-by.

It makes no difference.
Just as you think.
If you please.
Behave yourself.
Be careful.
Don't bother me.
Don't do that again.
Don't be so inquisitive.
Excuse me.
How have you been ?
Help yourself.
I beg your pardon.
I was only in fun.
I saw you.
It serves you right.
It is your own fault.
Let me be.
Take care of yourself.
In a moment.
Who was that ?
You are mistaken.
You made a mistake.
It is no such thing.
You are very kind.
It is my turn.
I would rather not.
I don't wish any, thank you.
I guess so.
I think so.
I will see.
I will not tell you.
I would rather not say.
That is a secret.
That is so.
I can scarcely believe it.
May be so.
Perhaps so.
Are you sure ?
Are you certain ?
I couldn't help it.
Why so ?
Allow me.
Rather !
I can't possibly.
I'll make the endeavor.
Oh, my !
I think it is doubtful.
Hardly !
I have no objection.
I am afraid not.
I'll ascertain, if I can.
And the thousand and one other such expressions we use in every day

life. Do they not, in nearly every case, use the stilted instead of the natural form and almost uniformly omit, when occasion offers, the form that is usual among speaking people?

In the matter of letter-writing, which is only an extended conversational form, the defect is quite as noticeable.

But a short time since, I received a postal card from a graduate from an Institution for the Deaf that read :—

“ PHILA., Jan. 9d, 1890.

“ MR. WALKER :

You will come to the law, Tuesday, ten o'clock, Mr. Fahy office.”

What he meant was that his case would be called for trial-at ten o'clock upon the morning indicated, and that I should meet him at the office of his counsel. What he said hardly conveyed his idea, and it would have been extremely difficult for one not acquainted with such language and the circumstances to have gleaned his meaning. I would add here that the case was one in which the deaf-mute had unhesitatingly signed a receipt in full, though he had received but part payment.

How frequently we receive just such letters. How almost daily we try to carry on a conversation in spelling and in sheer desperation have to turn to signs. What monuments to teaching unworthy of the name !

To be sure, to the absence of a sense is this condition of affairs largely due, but in isolated cases the obstacle has been overcome and we have met even congenital mutes, who have been able to carry on a conversation as correctly, yes, as intelligently as the average speaking persons of our acquaintance. That this is the case indicates that any deaf person, not absolutely deficient in mental endowment, may be given the ability. The cause of importance to us, therefore, is not the deafness, but improper education and the remedy within our reach.

No simpler or safer rules for the correction of the defect could probably be laid down than these :—

I. USE THE INTERROGATIVE FORM CONTINUALLY.

II. USE RATIONAL AND NATURAL LANGUAGE IN TEACHING THE FORM.

Our actual time in the schoolroom seldom exceeds five or six hours a day, but who of us can do his whole duty to his class in that time? What conscientious teacher, with any heart in the work, does not rather spend double that time, in one way or another, on his pupils? Yes, those who are at the head and front of the profession are those whose almost every waking thought is of their class. He who spends but five or six, simply neglects his duty, and is a failure in the work. The most ordinary instructor will, in the devising of plans, the arrangement of work, the correction of copy, and in actual instruction, consume ten hours a day. Now, how much do we give to the interrogative form and the work allied to it? I will venture to say that an hour a day is the average time given by those within the sound of my voice.

Five times this would be but five hours per day, in school and out, and I contend that this would be as little as we can consistently devote to it.

The *narrative* form presents comparatively few difficulties, and we find the majority of our advanced classes using it with facility, and this, I fear, too often at the expense of the form of which we speak.

For years our physician-in-chief at the Institution in Philadelphia was Dr. Biddle, in his day one of the ablest practitioners in our State. His success with typhoid fever was phenomenal, and I never knew him to lose a case. A toothache, a trifling ecchymosis, a hang-nail, a corn, or a wart might be attended with fatal results, but the doctor was always at ease, when he could divert existing symptoms, and develop a case, if ever so malignant a one, of typhoid. And so, methinks, it will make more sure our ultimate success, if we take every exercise, in whatever branch and, before leaving it, make a conversational one of it. While aspiring after the facts of Physiology and Hygiene, of Natural Philosophy, of Physical Geography and the other advanced studies we teach, I fear we not unfrequently lose sight of the essentials, of that which is most practical, and, like La Fontaine's astrologer, "fall into a well."

There is no limit to the uses of the interrogative. Its first and most important value is, of course, to perfect the conversational powers, and thus to break down every barrier between the hearing and deaf.

As an aid in teaching arithmetic, it is invaluable.

As a means of cultivating the reasoning powers, it is quite indispensable.

Take the statement :

An armless man, passing through a forest consisting of four trees, came across a blind snake ; a half mile in length, sitting on a toadstool. The snake, seeing him approach, raised its foot to kick him. The man, however, was too quick for it. He seized a sunbeam, and struck it a violent blow across the trunk. The snake, smarting with pain, spread its wings and flew off, and the man was left to pursue his way in peace.

And, after asking for the reasons why it can not be true, enter into a discussion of them. There is no end to the information and use of language that may be elicited, and after a few such exercises you will be surprised to see how argumentation and reasoning are developed.

As a means of developing the remaining senses, it is quite as valuable.

•We may take any article within our reach and ask by what sense we perceive it, by which we may ascertain its form, its density, its weight, its color, its size, its order, etc.

Pick up the various things in the room and ask them to guess their weight, letting them balance them in their hands to make the estimate, if they wish, and then weigh them in their presence.

Ask what their shapes are.

Ask the distances to various objects in the room, building and city, and then measure them, if possible.

Ask them the direction of the wind, and see if they can tell by observing the leaves, the curling smoke, etc.

Ask them the first time you are out in the woods with them which

direction is North and see if they can tell you by observing the sun or the bark of the trees around them.

Make them shut their eyes, place various objects under their noses, and have them tell you, from the odors, what they are,

Show them pieces of goods of various colors and then cover them, and see if the pupils can remember the colors and match them.

Hand them goods and have them tell you, from the feel, whether they are cotton or wool.

Hand them various metals and see if they can tell, from the feel, what they are.

Cut up fruits and meats, and have them tell you, from the taste, what they are.

Cover your table with numerous articles; let them remain a few moments, and then sweep them off, and see who can name most of them.

Such exercises are of the greatest interest, and if you will carry on the work, by the interrogative alone, you will find that while cultivating the senses, they increase to an almost miraculous degree the use of the colloquial language.

The importance of interesting the pupil cannot be too highly estimated. A study may be pursued in ever so conscientious a way; if the element of interest is lacking, the good attained is slight indeed.

It is said that the maltsters of the present day mingle with the products of their stills a saline principle, that has the peculiar property of making the second glass of beer more palatable than the first, that excites a greater thirst for the third than for the second, and so on with each succeeding draught.

What a stride we will have made when we have discovered the secret of imparting knowledge in such a way that the mind is filled with an added thirst for information as it acquires a craving for all that broadens it, a gnawing that will not let it rest satisfied in the presence of aught that it does not comprehend, and that leads it ever on and up. Every branch may, if we teach it with judgment, be made a delightful game, instead of the onerous task it too often is, and the first effort of the teacher should be to excite this interest. To do this is to make his own work a pleasure, and the end is then already in sight.

The second rule I have laid down, that we should use rational and natural language, may seem to you to be a matter of course, and entirely unworthy of suggestion, and yet how many of us exercise a proper care in this respect? Do we not even encourage the peculiarities of speech we condemn, by actually teaching, at times, questions that are not only useless, but absolutely ridiculous?

"Do you see the map?"

"Yes; I see the map."

"Where is the map?"

"The map is on the wall."

"Is the map new?"

"No; the map is old."

And so the teacher goes on propounding and answering questions that no sane speaking person would think of asking, under the circumstances. The object of a question is to elicit information. Of

course, the pupil sees the map, and it is just as evident to him that it is on the wall, and, an old one.

How absurd ! I am often reminded as I look over a lesson composed especially for the deaf of the little book of illustrated stories published some time since. On the first page, we find a picture of a river, with the trunk of a dead tree projecting diagonally out of it. Clinging to the top of the tree with convulsive and apparently fast loosening grasp is a small boy, and under him an alligator with distended jaws. Below the whole, we find the following colloquy :

" Do you see the tree ?"

" I see the tree."

" Where is the tree ?"

" The tree is in the water."

" Who is on the tree ?"

" A little boy is on the tree."

" What is under the tree ?"

" An alligator is under the tree."

" What is the little boy about to do ?"

" He is about to feed the alligator."

" Does the boy love the alligator ?"

" Hardly ; but the alligator is very fond of little boys."

This language, idiotic as it is, is scarce less absurd than that we frequently find presented to a class of the deaf.

A desire to suppress the tendency to ask pointedly personal and impertinent questions, actuates us too frequently, I think, and tends to the introduction of this class of work. In giving these nice ideas of the proprieties, we are apt to suppress naturally arising inquiry, and introduce, ourselves, this unnaturalness of speech.

I think we can safely encourage almost any sort of inquiry, be it ever so apparently impertinent, during the first five years, at any rate. There will be abundant time for the niceties after that.

Not long since, passing through the sitting-room of our institution, with a package under my arm, I was stopped by a very small specimen indeed, just entering upon his second year, with the inquiry, " What is in that package ?" Fifteen years ago, I would probably have laid it down and told him, indignantly, in gesture, that it was " gentlemanly not " to ask such questions, even, possibly going to the extreme of saying that it was his " business not." The course I pursued, however, at this time, was a different one. I spelled very slowly, so that he and all his little classmates could see me clearly. " There is an old coat in it," and spelled it again and again until they could all spell it. Then I opened the package and showed them the contents. It was a little lesson which they never forgot. My encouragement of the boy got me into a great deal of work, for he and all of the brighter ones around him who saw me pat him on the head, and say that he was a smart boy, have ever since, in season and out, beleaguered me with such questions, to all of which I hope I have given the same patient attention.

We do not encourage enough the asking of questions. It should be a principle to stop in the midst of any occupation, and reply pleasantly to a well-spelled question, adding a word of commendation for its correctness, if correct, or if incorrect, carefully correcting it, supplement-

ing our answer, if the question be stilted, by "speaking people usually say," etc.

Teaching is the easiest and most delightful occupation in the world—and the hardest; the easiest when it is entered upon with zeal, the the hardest when done simply for the pecuniary return, and its results are fullest in fruition and most encouraging, or barren and most discouraging according as the means we employ.

La Fontaine, in his simple instance, tells us of a wise man who lives everywhere and at all times, for whom "all place is a temple and all seasons are summer," whom we find treading every walk in life and floundering in the well by every wayside, who is ever soaring after the unattainable and who fails to provide bread.

Are there any of these "wise men" among teachers of the deaf? Do any of us ever set before immature minds deeply scientific facts and abstract principles in studies away beyond them, while they can not ask in correct English for permission to get a drink? Do we not often talk to them of *consomme*, of quail, of *pate de foie gras*, spring lamb and pie, while they sit actually starving for the bare necessities.

It has been asserted that there can be no perfectly rounded character without all of the five senses, the loss of even touch, taste, or smell, warping one, to some extent, and leaving a deficit. If this be true of the deaf, we can lay the blame in but one place, and that place at the door of the teacher.

In the conduct of a legal proceeding, counsel who arises to the exigencies of a case, addresses himself, first of all, to finding the vital fact at issue, and then, casting aside all minor and less material questions, or giving them individual attention, devotes himself to the point upon which, in his judgment, everything hinges.

If there is a branch of our instruction more important than all the rest, and around which all the others should centre and be subservient, it is, in my estimation, this interrogative.

I attribute many, nay, all of the so-called peculiarities of the deaf to the lack of free conversational association with those around them. Give them this, and there is salvation for the mind. Give them this, and a demand of every-day life is supplied. It will refine, broaden, cultivate and educate to the niceties, and then will follow, as the "day the night," that perfect poise of character that will be a living refutation of the pessimistic doctrine that there is no compensation for a deficient sense.

THE CHAIRMAN: The next exercise will be the reading of a paper by Prof. C. L. Zorbaugh, of the Kansas Institution, upon the subject, "How Shall Time Phrases be Taught?"

HOW SHALL TIME PHRASES BE TAUGHT?

By Charles L. Zorbaugh, of the Kansas Institution.

Into the written and spoken expression of thought enter certain elementary ideas that lie, like broad foundation stones, at the base of

the fair structure of language. In order to give the mind a ready and easy tongue, it is needful to teach it what these elements are, and to do this is the constant effort of grammarians.

In all narrative and in much of colloquial language, the prominent elements are those of place and time. History is mostly written to tell us where and when certain things were done. Especially in the language of the street, and in the business of the desk and counter does the mind concern itself with the question of time. We are ever asking "when?" When did you see him? When was he killed? When did you say you left home? How soon can you send this up to the house? When do you leave for the East? When will the room be ready for occupancy? How long since did you see him? How soon can I have a talk with you? When will you be at leisure? When? When?

And so it runs all the day long, through all our busy lives.

It is to be expected, therefore, that our language should be stocked with a great number and variety of expressions of time, and we are not disappointed. The number of time phrases commonly in use is large, and for pleasing and accurate speech one must have them at ready command.

With ordinary children, there is no difficulty here, for with open ears and receptive memories all the common phrases of speech are acquired with their growth, insensibly and without effort, like the bone and tissue added to their bodies by the unseen processes of life. But with the deaf we know it is not so. All must be taught them, with patient pains and many disappointments, but "the gods give all good things for toil," we are told. It is the price of success, and for it success can be had.

It may not be the case everywhere, but we have found this difficulty with many of our pupils. They are not usually exact in expression when it comes to a statement of time. In some cases it is likely that the mind has not been well trained to accurate thinking, and without exact thought, language must necessarily be indefinite and unsatisfying. But it is equally probable that in many cases the trouble lies in poverty of words. Desiring to be exact, they want the language to express themselves with accuracy, and are therefore habitually indefinite. For example, a boy was giving his teacher an account of something that had occurred some time before. The teacher asked, "When did it happen?" "Long ago," was the reply. "But tell me exactly when." "Oh, I don't know. A long time ago."

Another writes: "We will go home next June 11th," and from one year's end to the other, he seldom uses any other form to express the fact to which he looks forward. In the one instance the pupil has not learned to fix events exactly in their relation to time, and to so express them. In the other, he wishes to be exact, but has only one way to be so, the result being that his language is tame with an unvarying monotony.

It is altogether likely that a fair number of time phrases have been taught him at one time and another, but it has been like fine shot from a smooth bore, so scattering as to make little impression at long range. There has been a lack of system, perhaps, and what has been learned has not been fixed by sufficient drill. At any rate, he has not a good

vocabulary of time phrases. The mere study of grammar does not afford him much relief in this regard. It is not the knowledge of grammatical principles he lacks. He may have these and yet have little or no command of many of the time phrases we commonly use. Such expressions as : "A week ago Monday," "Three weeks ago last Saturday night," "Two weeks from next Tuesday," "Quite a while ago," "For many a day," "Pretty soon," "Bye and bye," are not learned from grammars. Hearing children learn them as they breathe the air. The deaf must acquire them by means of special instruction.

How shall they acquire enough of these time phrases to satisfy the ordinary demands of language? That's the question.

Is it safe to trust that sixteen to twenty or more teachers, all in the same general line, it is true, but of whom each knows little of what the other is teaching, will, in the end by their united though undirected effort, have succeeded in teaching the deaf pupil all he ought to know of such language?

Is it not altogether likely that he will have been taught some phrases often, many frequently, and many more not at all?

Now it is not meant that this particular difficulty in the teaching of language claims special merit or distinction. It is but one angle of a many-cornered difficulty.

Of all the language we teach, it is true that organized effort, well-directed system, is the one thing needful in order that no exertion of the teacher be lost, and that every hour of the course, be its importance much or small, contribute its part directly toward the common end. It is for this purpose that we have courses of instruction.

It is true, also, that many of these phrases are idiomatic, and might be referred to the teaching of idioms, but this will not suffice. There are many more that have no kinship with idioms.

To the writer, it seems that the practical nature of this subject of time, dealing as it does with that which enters largely into the life of every day, and the great number of turns of expression with which it has to do, might justly call for particular attention other than given to language in general.

The thought suggesting itself to him is that a complete list or catalogue of time phrases might be arranged, and its teaching distributed throughout the course in such portions and with such care as to secure a thorough canvass of the whole.

He has for some time had the preparation of such a list in view, but has not been able to prepare it for this paper.

Does the plan commend itself? Is this a subject worthy of attention, or has the writer overestimated its importance?

THE CHAIRMAN : The next paper will be upon the "Use of Idioms," by Prof. W. G. Jenkins, of Hartford.

TEACHING IDIOMS.

By William G. Jenkins, of the American Asylum.

"Three things," says an old teacher, "are necessary to good work ; good material, good workmen and good tools." If the material which

comes into the hands of the teacher is not plastic, remains in spite of all that he can do perfectly rigid, success is altogether impossible, no matter how efficient the teacher may be, nor how orderly his methods. Success in teaching deaf-mutes is only relative. There will always be disappointments, for the apparent results are seldom, if ever, commensurate with the amount of work bestowed. There is a very general concensus of opinion that our English speech has a normal order of development, and furthermore, this normal order in the structure of the English language, implies the existence of an order which is abnormal, irregular, and, grammatically speaking, a violation of what is called regular English. The difficulty of writing English is not in acquiring a knowledge of the twenty-five or thirty rules, which form the body of English syntax, for these can be easily covered in four or five years, but in getting the swing of those phrases and phraseological expressions which defy all grammar. After four or five years of consecutive drill along a pre-arranged system of grammatical principles, there comes a time when this line of teaching ceases. It is true that the work already done could be amplified to almost any extent, but it is for us to consider whether or not it is possible to supplement the instruction already given, by some degree of method, in teaching those peculiar constructions, commonly called idioms, with which our language abounds. I have no special theory to advocate, no new discovery to proclaim. For us, who are teachers of the deaf, the philosopher's stone is the constant, unremitting use of English speech. Many of the suggestions of this paper, I have found helpful, others are presented as worthy of experiment, to be thrown overboard, as so much flotsam and jetsam, the moment they are discovered to be worthless.

It has often been said that deaf children have as much aptitude for one language as for another, that they could, for example, acquire the modern languages of Europe, or Greek and Latin, as readily as they could English. Subjectively considered, this is true, but there is a great difference in languages; some are quite simple in structure, while others are so complex as to make them very difficult in attainment; all could not be acquired as readily as the English. "William struck Peter," is a very simple and easy construction, but in Latin there are six ways of expressing this one fact:

Gulielmus percussit Petrum.
 Gulielmus Petrum percussit.
 Petrum percussit Gulielmus.
 Petrum Gulielmus percussit.
 Percussit Gulielmus Petrum.
 Percussit Petrum Gulielmus.

—*Marsh Lectures on English.*

In one sense we say of this difference that it is a difference of idiom, using the word as synonymous with the syntactical order of a language. That is not, however, what we mean when we speak of what is idiomatic, and in order to clearness of thought, it is well to remember that the subject under consideration now is "*idios*," anything in our speech which, in construction, is peculiar.

These linguistic anomalies are found in all languages. Sometimes

they are classified, as at the end of "Arnold's Latin Prose," and sometimes they are arranged under syntax, accompanied with exercises to drill the student in language forms, as in "Magill's French Grammar."

It is always easy to detect unidiomatic English, even if there has been no violation of grammar. We open the revised version of the New Testament and read, "Paul, thou art beside thyself; much learning hath turned thee to madness." We are all conscious, at once, of an unnatural use of English. Every child in the nation, in justifying his rude behavior toward a playmate, uses the correct idiom, when he says in terse, vigorous Saxon, "He made me mad." As an illustration of English written in French idiom, take this letter furnished by the celebrated Hannah More, and found in "Harrison on English Speech":

"DEAR MADAM :

"I no sooner found myself here than I visited my new apartments, which are composed of five pieces. The small room that give upon the garden is practised through the grand one, and there is no other issue. As I was exceeded with fatigue, I no sooner made my toilet than I let myself fall upon a bed of repose, where sleep came to surprise me. My lord and I are in the intention to make good cheer and a great expense, and this country is in possession to furnish withal to amuse one's self. All that England has of illustrious, all that youth has of amiable, of beauty, or of ravishing finds itself in this quarter."

Here the words are English, but the idiom is altogether foreign.

In suggesting a supplementary course for the closing years of a pupil's school life, do not understand me as urging any change in what has become his diction, save that which comes by a natural process of accretion, but, in order to read books, our pupils must have some knowledge of the common phrases current in our English speech. This instruction may be carried on by daily reading lessons, by selecting odd forms of construction as they are found on the printed page, or by daily selections from the morning papers, drawing attention to such idiomatic phrases as there occur. This last practise has the double advantage of whetting the pupil's appetite for the newspaper while also improving his composition. There is, in fact, never a time in the education of the deaf, when they are not acquiring idioms. They cannot ask questions of so simple a character as, *How do you do?* *What for?* *Where have you been?* without using forms that are in some sense anomalous. The form in which a question is put makes a great deal of difference in the meaning. The census-taker came to the house of Mr. Smith and wanted to know his age. The request came to his wife in this shape. "The man at the door wants to know how old Mr. Smith is." "Old Mr. Smith is dead," she replied. "No! No! he wants to know how old—he wants to know Mr. Smith's age." The ambiguity arose from changing the direct question to an indirect one, a difficulty that confronts the teacher of the deaf nearly every day of his school life. The necessity for instruction in those common phrases which form so large a part of colloquial speech, may be illustrated by the following incident related to me after the reading of this paper. A young man, deaf, calling at a house in one of our cities was ushered into the parlor; his card was presented, and the recipient of the call not being quite ready for callers, sent back a slip

of paper saying, "*Make yourself at home.*" This the young man interpreted as a request to leave, and he left. There are stories current among the deaf of the misinterpretation of such phrases as, "Take a chair," "Walk out to supper." I do not say that all the odds and ends of conversational speech are to be used in the written language of the deaf. I have no desire to have them use such idioms as, *Bring down the house, Beyond all expectation, Out at the elbows,* and hundreds of similar ones, but it is important that these idioms be classified and taught, if the deaf are to read books intelligently. A knowledge of these forms is necessary, if our pupils are to take any pleasure in reading. The process of learning to read under the tuition of a teacher is something very different from the art of reading. Those who care to make a collection of idioms for themselves will find collections in, "Peet's Course of Instruction," also in the *Annals*, scattered through "Roget's Thesaurus," under the several prepositions in Webster's Dictionary, and in some of our popular grammars. These phrases ought to be accompanied with definitions in easy, simple language, in order to be of any lasting benefit to the deaf.

After four or five years of schooling, it may be taken for granted that our pupils have become quite familiar with the fact that *a* means one—"Give me *a* book," means give me *one* book; and that when more than one is meant, the definite article must be used—"Give me the books." It is quite probable that by this time they also know that *a* is sometimes used, not for *one* but for *each*—as in "ten cents *a* yard," "twelve cents *a* dozen." After teaching our pupils that *a* can not go with plural nouns, it must be something of a surprise to find that "a few days," "a few dollars," "a great many people," and "a great many times," are also correct; but dropping "few" and "great," the sentences become again ungrammatical. We teach them again that "*a hundred men*" is proper, but not *a fifty*. What principle of grammar can be assigned for *a dozen eggs*, but not *a score eggs*, here we need the preposition *of*. It is not unusual after these facts have been expounded and illustrated before the class, to find a slip like this, *a many times*. The careful teacher proceeds at once to draw attention to the fact that *a* here follows the adjective, and "*many a time*," "*such a little girl*," are the correct forms. He will do this with all the force and all the energy at his command, impressing upon his pupils the necessity of noting, *many a time, such a little girl*. Following this analogy, it is not surprising to find the expression, *very a good man*, and when this again has been restored to its proper order to meet with, *a not honesty boy*, and, *a too cross man*. It is necessary sometimes during the course to draw attention to the fact that the indefinite *a* is found before such plural forms as *bellows, gallows*, "*a two shillings*" (Johnson), *a three days' journey*, "What *a* seventy-one years!" (Carlyle). The boundary between the article and the numeral is not easy to define. "I will not hear *a* word, not *a* word, not *one* word." (Sheridan). There is further difficulty, in the use of the definite article, in such forms as *a man, woman and child*, while "*a cow, ox, and pig*," each require the article. This little particle *a*, often changes the meaning of a sentence. The newspapers report that few senators accompanied the President to Boston. The number is not worth mentioning. The tone of disparagement is unmistakable; but introduce

the article and say, "A few senators accompanied the President to Boston," the number has been lifted into dignity and all contempt removed. The difference between a man that has *a little money* and one that has *little money*, is the difference between riches and poverty. A man with a number of horses, left by will *a black and white horse* to one of his friends. How many horses did he leave? That became a question for the courts to decide. Having noted the various uses of the indefinite article, it might be well for the teacher to write a story, and let the class trip it off as rapidly as possible on their finger ends. Something like this may be worth trying.

A man, woman and child lived in the country, in a Country in Europe. The man was a farmer. He had a horse, six cows, an ox and a pig. He had also a great many hens and a few ducks. Many a time the farmer went to a neighboring town to sell butter and eggs. He sold the butter at twenty-five cents a pound and the eggs at eighteen cents a dozen. He used to take a little food in his pocket to eat on the way, but he ate little. After disposing of his goods, he started for home. It was beginning to be dark and he hurried along. He had little butter left, but there were a few eggs in one of the baskets. (Let the teacher conclude the narrative, in a way suitable to his purpose.)

It is almost impossible to recommend any system in teaching the definite article. Its use is so very arbitrary, that there are as many exceptions as instances under any rule that can be formulated. The obvious rule of omission before continents, as Europe, Asia, Africa, etc., and its use in designating the oceans, needs no comment. Yet while with divisions of land the article is generally omitted and used with bodies of water, the usage is not uniform. Lake Erie, Lake Geneva, Lake Nyanza drop the article, while with some islands, we use it, as, the Island of St. Helena, the Island of Cuba, the Island of Corsica. Only constant use of the National language, whether by writing, spelling or speech, can give the idiomatic use of the article. The necessity of acquiring a correct use of the article may be seen from the following piece of false syntax: "Beware of drunkenness; it impairs an understanding; it wastes an estate, destroys a reputation, consumes the body, and renders the man of the highest parts the common jest of the meanest clown."

The study of the Adjective reveals several things that are both curious and interesting. The special difficulty which the deaf have here to contend with is in selecting the proper order of two or three qualifying words. There are a certain number of adjectives which run together in pairs and ought to be linked together. That form of oral caress which our word *little* implies, in such combinations as, *dear little, pretty little, sweet little, good little*, loses all its tenderness by inversion. The sweet little girl is robbed of her loveliness when described as a *little sweet* girl. Who can think of a man beginning a letter to his mother as, "My Old Mother," without a shudder. It is not much better when he addresses her as, "My Old Dear Mother," but when he writes, "My Dear Old Mother," there is a whole flood of tenderness and affection expressed, the most sacred associations of a lifetime cluster around these words, and the grown man at their utterance is carried back to all that was most reverent, pure and gentle, in the day

of his boyhood. Let us then try to inculcate the true order of these adjectives. "A pleasant, fat, old man," not "An old, fat, pleasant man." "Large, sweet, yellow peaches are the best." There is also some confusion in the use of the adjective, from the peculiar position in which adjectives of degree, number, extent of time, and measure are placed. "Gen. Smith had an army, twenty thousand strong." "A man dug a well ten feet deep." It was because he had been well taught in regular English, that the deaf boy wrote of his baby brother: "He is sixteen heavy pounds and two long feet."

There are certain adjectives found only as predicates; they never precede the nouns. Examples of this class are, *afraid, alone, alike, aware, alive, asleep, awake, athirst, aloft, afloat, plenty, worth*, and many others.

Then there are adjectives which, when used as predicates, take the adverbial forms "*much*" and "*very much*," while others can only be used as "*very*"—*e. g.*—

MUCH, or VERY MUCH.

afraid,	displeased,	provoked,	emaciated,
ashamed,	excited,	troubled,	honored,
delighted,	interested,	disturbed,	agitated,
disappointed,	frightened,	disliked,	obliged.
pleased,	grieved,	beloved,	

VERY.

tired,	accomplished,	polished,	degraded,
learned,	distinguished,	depraved,	spirited,
animated,	celebrated,	drunken,	labored.
talented,	elevated,		

A third class of adjectives cannot be qualified by "*very*" alone, nor yet by "*very much*," but require "*well*," and "*very well*." The habit of using *very* is so fixed and inveterate, that a knowledge of these three uses ought to have some influence in freeing our pupils from such errors as, "*very afraid*," "*very hurt*."

WELL, or VERY WELL.

educated,	trained,	written,	made,
informed,	performed,	composed,	cooked,
versed,	secured,	arranged,	painted,
prepared,	managed,	behaved,	washed,
satisfied,	dressed,	conducted,	satisfied.

Teachers can add to these classes as the necessities of their work require. The adverbs in *-ly* do not, I think, present any difficulty, but there are quite a number of adverbs that writers with a good knowledge of English are liable to misuse. A hearing child would recognize in a moment the difference between "*standing still*" and "*still standing*," but, to one depending upon sight, the difference is not so apparent. The adverb *only* is one of the most difficult to use idiomatically. The sentence, "He only mourned for his brother," is capable of six different meanings according to the location of this word. (Swinton's Grammar,

page 177). There are a vast number of phrases used as adverbs which it is well for the pupils to know, but not well for them to attempt to write. I have no desire to see pupils of even seven and eight years' standing, attempting such forms as, *at any rate, at all hazards, as a matter of course, by all means, depend upon it*, and others of this class.

In schools where signs are used, a wrong definition in signs is sometimes responsible for the mistakes which a pupil makes. The boy, who said that he was going to study *too hard*, meant that he was going to study *very hard*. He had the wrong sign for "too hard." Indiscriminate signing for such words as, *buy, sell, pay, cost, debt, and worth*, among the pupils, with too little practice in the English use of them, is certain to end in general confusion. Such idioms as *there are, there came, there happened to be*, are seldom used freely by the deaf. A good exercise just after recess would be to have the pupils recite by spelling some extempore jingle, like, "I have come from the garden in the yard. In the garden in the yard, *there are* four corners. In the first corner *there are* some flower-beds. *There are* many flowers there. I am fond of flowers. In the second, *there are* some fruit trees. *There were* many cherries on one of the trees. In the third corner *there were* some blackberry and raspberry bushes. The berries are not ripe yet. In the fourth corner *there were* some grapevines. I went among the vines a week ago. *There happened to be* a nest there. The old bird flew out. I looked into the nest. *There were* three speckled eggs in the nest. While we were in school, *there came* a mean boy into the garden, and robbed the nest."

Whatever form of exercise be arranged by the teacher, it ought to be spelled and re-spelled, until every word and letter is memorized. The protest against memorizing lessons is unreasonable. Let the lessons be committed to memory, and repeated over and over again, until the pupil uses the language for other circumstances, instinctively, as his own. When the mind becomes so completely saturated with the mechanical forms of speech, that the learner involuntarily writes them correctly, an immense gain has been made. It goes without saying it, that a child is not to cultivate memory at the expense of thought. The teacher must see to it that his class read and write with an understanding of the language before them, but there is far greater probability of our pupils retaining the sense of what they have read, while forgetting how to express it, than of remembering the language and forgetting the sense. There is no other way, in my opinion, of acquiring the mastery of a new language, than by memorizing its forms, reading, and writing it.

Skipping now to prepositions, the first construction of an idiomatic nature that suggests itself is the old genitive case, what in English grammar is called the objective case after the preposition. There is some degree of inconsistency in the use of this construction, for a *bar of iron* is an *iron bar*, but a *bottle of ink* is something very different from an *ink bottle*. The *army of Napoleon* is *Napoleon's army*, but the *day of the Lord* is not equivalent to the *Lord's Day*. Yet, notwithstanding this apparent inconsistency, it is possible to raise this construction into three well-defined classes.

1. There is a class of genitives with *of* which denote possession, commonly called the possessive genitive. Examples of this class are :

The palace of the king.	=	The king's palace.
The works of Longfellow.	=	Longfellow's works.
The character of Washington.	=	Washington's character.
The son of the President.	=	The President's son.
The home of Lincoln.	=	Lincoln's home.
The age of Mr. Smith.	=	Mr. Smith's age.
The heat of the sun.	=	The sun's heat.
The death of Garfield.	=	Garfield's death.
The trial of Guiteau.	=	Guiteau's trial.
The skin of the tiger.	=	The tiger's skin.

2. The second class, called in grammars the *partitive genitive*, is not capable of being changed into an equivalent possessive. For example :— A bit of wood, a sheet of paper, a piece of crayon, a yard of ribbon, a load of coal, a suit of clothes, the top of the mountain, the handle of the knife, the lid of the desk, the leg of the table, the knob of the door, the key of the desk, the end of the string, the lining of the coat, etc., etc. There ought to be no trouble in teaching the different notions which distinguish these three classes.

3. The third class, of nouns following *of* as a preposition governing them used in an objective sense. *Of* in these examples has very nearly the meaning of the preposition *for*, as, for instance :—

The fear of his father.	=	The fear for his father.
The love of home.	=	The love for home.
The desire of riches.	=	The desire for riches.
The field of battle.	=	The field for battle.
The price of a horse.	=	The price for a horse.
Rules of conduct.	=	Rules for conduct.
The care of the teeth.	=	Care for the teeth.
The season of travel.	=	The season for travel.
The hope of success.	=	The hope for success.
A hatred of lying.	=	A hatred for lying, etc.

But, unquestionably, the greatest difficulty in writing English is to acquire a correct use of those verbs which are accompanied by prepositions. Very often, the meaning does not inhere in the verb itself, but in the union of both, as : Look out, keep on, go ahead, take down, eat up, etc.

In attempting to group the prepositions, there are first those which denote origin, or source, such as : Of, off, out of, from.

2. Those prepositions denoting motion to a place, as : To, into, toward, till, until, up, down, along, through, across, about, round.

3. Prepositions of rest like : In, upon, at, by, with, between, among, far.

4. Those indicating position are : Before, behind, below, beneath, beside, between, after, against, among, above, in front of, opposite to, over, under, inside, outside, beyond, across.

Some of these prepositions are annexed to a great number of verbs. A copy of these forms printed and placed in the hands of the pupils, could not fail to impress upon their minds the mechanism of speech, and if they can, by mechanical devices alone, get the rhythm and flow

of English speech, I do not think we ought to trouble ourselves about any pupil's inability to parse what he writes. The following are a few verbs followed by *of*:

repent of,	convict of,	treat of,
boast of,	convince of,	read of,
complain of,	take hold of,	write of,
accuse of,	seize hold of,	take care of,
suspect of,	think of,	tire of,
remind of,	dream of,	make of,
inform of,	hear of,	make a fool of,
warn of,	speak of,	make a present of, etc.

The following adjectives make use of the same preposition.

sick of,	certain of,	ignorant of,
afraid of,	aware of,	careless of,
proud of,	fond of,	desirous of,
ashamed of,	conscious of,	jealous of,
full of,	sensible of,	envious of,
capable of,	mindful of,	impatient of,
susceptible of,	forgetful of,	enamoured of,
guilty of,	tired of,	suspicious of,
innocent of,	reckless of,	glad of,
sure of,	confident of,	more of.

The idiomatic character of these combinations will be clear, if we attempt to use some other preposition than the one usually found in combination. Let us try the experiment: fond with, fond about, fond from—not one of these combines with the word fond; the fixed, stereotyped, iron-bound phrase must be *fond of*.

It is far from my purpose to go *seriatim* through these prepositions, but consider for a few moments the combinations with the preposition *to*. It is used with verbs denoting external acts, like, *bow to, bend to, kneel to*; in addressing a person, as, *speak, talk, whisper, call, sing, pray, write, send, lie to*; for the cleaving of one object to another, as, *cleave, glue, cling, stick, grow, hold on to, bind, tie, link, chain, rivet, screw, nail, fix, join, attack, marry to*, and all verbs of this general notion. To this class, again, belong those verbs of occasioning, demanding, of obligation and constraint, of justification and inclination, followed by *to*, often with the infinitive and, we have, *disposed to, want to, mean to, intend to, going to, summon to, enticed to, stirred up to, force to, compel to, oblige to, provoke to, threaten to, refuse to, promise to, used to, try to*, and adjectives derived from this same idea. A few common idioms with *to*, are: "turned to stone," "changed to joy," "reduced to poverty," "rent to tatters," "dashed to pieces," "burnt to ashes," "beaten to a jelly," "sing to sleep," "shoot to death," "come to a conclusion," "come to grief," "commit to memory," "stand to reason," etc. Here, too, are to be classed the following adjectives:

agreeable to,	sweet to,	due to,
suitable to,	fair to,	common to,
congenial to,	precious to,	free to,
according to,	sacred to,	superior to,

dear to,
pleasant to,
delightful to,

welcome to,
hateful to,
peculiar to,

liable to,
inferior to.

The discussion has been continued far enough to show how far classification can be carried on. It is not to be expected that a class can digest all that is possible in this direction, but they can get general impressions of the most common combinations; they can be taught that they are not to read isolated words; that the meaning of a sentence does not consist of each word with its lexical signification, but depends upon the idiomatic phrases which may be found in it. I intend this coming year to supplement this teaching of idioms, by requiring the class to commit to memory, the following list of every-day similes:

“As poor as a church mouse,
As thin as a rail,
As fat as a porpoise,
As rough as a gale,
As brave as a lion,
As spry as a cat,
As bright as a sixpence,
As weak as a rat,

“As round as an apple,
As black as your hat,
As brown as a berry,
As blind as a bat,
As mean as a miser,
As full as a tick,
As plump as a partridge,
As sharp as a stick,

“As proud as a peacock,
As sly as a fox,
As mad as a March hare,
As strong as an ox,
As fair as a lily,
As empty as air,
As rich as a Cræsus,
As cross as a bear,

“As clean as a penny,
As dark as a pall,
As hard as a millstone,
As bitter as gall,
As fine as a fiddle,
As clear as a bell,
As dry as a herring,
As deep as a well,

“As pure as an angel,
As neat as a pin,
As smart as a steel-trap,
As ugly as sin,
As dead as a door-nail,
As white as a sheet,
As flat as a pan-cake,
As red as a beet,

“As light as a feather,
As firm as a rock,
As stiff as a poker,
As calm as a clock,
As green as a gosling,
As brisk as a bee,
And now let me stop,
Lest you weary of me.”

THE CHAIRMAN: The next paper, owing to lack of time, will be read by title only, but will be printed in the proceedings. It is by Prof. Edward A. Spring, of Boston, and is entitled “Form-Study for Character-Building.”

FORM-STUDY FOR CHARACTER-BUILDING.

By Edward A. Spring, of Boston.

There are seven words which I here take to illustrate what can be shown by different kinds of work.

Some one has said: “All important work is nine-tenths drudgery.”

Supposing this to be true, let us start with drudgery, as the lowest step for all work. When drudgery arrives at a precision which does the work perfectly, but still without thought—the worker being a mere machine, although a successful one—that is automatism. The other steps are plain to see—

7. GENIUS.
6. TALENT.
5. VERSATILITY.
4. INGENUITY.
3. SKILL.
2. AUTOMATISM.
1. DRUDGERY.

Doubtless all work partakes largely of each of these seven that is below its own kind.

Genius, if victorious, must start with a base of supplies; and must always be able to wait for the baggage to come up. Every work of genius includes all of the seven.

General Sherman began his speech at Portland, Me., last Fourth of July, with the words: "It is not the food we eat that gives us health and strength, but that which we digest."

So we may say: "It is not the faculties we possess and train, but the way we use them, that makes our lives complete."

It is not the Genius (No. 7), the Talent (No. 6), the Versatility (No. 5), that enables one to do great works, or any work truly. He may turn out a lamentable failure with all these three, or he may prove a rogue of the most dangerous type while possessing Ingenuity (No. 4) and Skill (No. 3). But it is such employment of the faculties as to combine their use in proper proportions, that accomplishes worthy results and tells of a wise education.

Drudgery can be performed by any creature with muscular force enough for the allotted work. A horse, an ass, a dog, can turn a mill fitted to the power of each. I have seen even a trained flea turning a little wheel. While drudgery is the lowest order of work, as to intelligence required, it is often as necessary to results as the higher grades.

Its lesson is patience.

Indeed, Carlyle said (in view, possibly, of the "nine-tenths drudgery" in it—which he so chafed under): "Genius is the capacity for taking infinite pains."

We require work in all these six lower grades, and a long stretch of talent before we can begin to approach genius—which will always be rare in the world.

It requires a long stretch of wire in order to obtain the spark at the end of it. Not only that—it requires, equally, the stretch of wire back again to complete the circuit. The wire is drudgery—the fire is genius.

In education, let each of these grades of work lead up the flight to the next step.

Let drudgery lead to automatism, automatism to skill, skill to ingenuity, ingenuity to versatility, and versatility to talent.

As to genius, we need not try to produce that by any of our methods or schemes of education. That may be helped, or rather left unobstructed, but it cannot be taught.

But I believe *every* rational human being is capable of talent—and there is room enough for all—for between the lowest order of talent and the highest, where it approaches genius, there is a wide range.

A very common misuse of language, by the way, is to call, what I mean by the word versatility, “genius.”

Skill, if by that is meant a machine way of performing certain actions, is undesirable, “skilled labor” is often mere drudgery.

Our lives should be ordered by reason, and not by mechanism. Perfunctory actions are not the part of a reasonable person, and by skill is commonly meant perfunctory action.

In athletic training, such as emphasizes only one set of muscles, there is danger to health.

There is danger to character in occupation that makes the worker a drudge by its narrowing influence.

As little Tommy Stubbs, the nail-maker, or as a sufferer from “writer’s cramp,” have their fingers drawn up like bird-claws, so the mind can lose its power of unbending.

Drawing should be always taught, if it were only to free the hand from the automatic process of writing.

Mere skill is chiefly commendable for the two qualities of consistency and precision—*both cheap virtues*.

Going by rail to a place is being confined to a routine. The only object of the rails is to save, by a quick, temporary expedient, the long fatiguing routine of horse-journey. The only object of the horse was to save the still more tiresome lifting the right and left foot in regular succession.

A hundred miles in five days would be good walking. But when the traveller reached the end of his hundred miles, he would want a day’s rest.

A hundred miles in two days would be good going with horses. He would need some hours’ rest after it.

A hundred miles in three or four hours is easily done on the railroad, and is no more than a pleasant resting—the traveller arriving refreshed and ready to walk freely, or do what he will.

“The object of all ‘organization, is to do without organization,” said a philosopher.

The object of all routine, is to get through with the routine as quickly as possible.

On the hundred-mile journey we avoid walking in order to walk.

A trade operation is a matter to be learned partly by routine, and performed mostly by routine.

But the operations of the Fine-Arts have less routine or mechanical work, and more individuality and judgment entering into their performance.

A track is laid to the objective point; in the trades, and the learner must be taught to use the track. But, in Art, the point to be reached is across an untravellered country.

Hence “all-round training” is the only kind of preparation that fits the artist best. The moment you try to train artists by setting them

to copy other men's work, you reduce them to the mere copying-machines whom every tourist sees by crowds in the European galleries:—men and women who know, often, only one thing—that is, to make a saleable copy of the particular picture it is their trade to reproduce.

Sir Joshua Reynolds, in advising young art-students not to copy too much in Italy, tells them to remember that he who follows some one else will always remain behind.

Now a word, not on training artists, but on the needs of education for the broadening of character.

Character-building is perhaps as good a phrase as any for the true aim of education.

Independence is another word expressing much. "We hear about educating for the end to make a living," said a lecturer at Chautauqua, "make the man, and the man will make his living."

Such training of the hand and eye as to develop all-roundness is what we want.

Clay-work, as an introduction to drawing, will accomplish this.

Clay, in very small quantities at first, can be used to run up all these steps of work from drudgery to talent. Then start again at No. 1, and keep a constant running up of the scale of work.

(1) Exercises in number, and various simple drills in clay can follow the *Drudgery* of making quantities of little balls.

(2) At Chicago, in 1887, were exhibited decorative carvings, from an Asylum for Idiots, of unparalleled accuracy and precision in repeating designs. This was *Automatism*, but little thought required. Let us decorate.

(3) *Skill* can be developed by a more difficult series of exercises in clay, training the use of the fingers and eyes to quantities, measures, angles, and the properties of matter.

(4) *Ingenuity* is sure to grow when children have clay to use. The simplicity of the material and tools give the greatest scope for "making the most of little." The teacher learns rapidly, but the children learn still faster.

(5) *Versatility* can well be increased, and interests and observation widened, when we consider that almost everything known has some connection with form.

Labor, work, business generally, is the changing the place of matter. Almost all work resolves itself, at its simplest, to the question of form.

Form-study, then, may be taken to mean the study of the basis of all activity.

(6) *Talent* may be developed by clay, as everybody knows. Since modelling is the foundation, not only of all forms of drawing and representation in "black and white," but of all kinds of art. The quick apprehension of children for what is typical, results often in remarkable things in clay, full of expression of their ideas. Adults have generally lost this early freshness, and lose time in acquiring what children will do spontaneously in clay.

(7) Our present vernacular is most lamentably imperfect and confused in the expression of the most commonplace facts. There are some two dozen different kinds of special dictionaries of terminologies used by English-speaking people in their callings. No one person knows all that these contain.

If we set the young children, before they have reached this confusion of tongues, to making, drawing, using, analyzing the type forms of things—"the alphabets of form and work"—certain stubborn facts will have been conquered by their own activity.

It is worse than useless to drill them in words, until the facts are known to them which the words refer to.

But with the basis of practice which I urge, the development of language is sure and reasonable, while some few may grow to successful workers in the higher branches of Talent, if not of *Genius*.

THE CHAIRMAN: The paper on "The Teaching of Art," by Prof. J. E. Story, of the Central New York Institution, which appears on the programme as next in order, has been withdrawn by the writer, who also requests that it be not printed in the proceedings.

THE CHAIRMAN: Our next is an unfinished paper on "Fractions," by Prof. G. W. Cook.

MR. COOK, of Michigan: *Mr. Chairman, Ladies and Gentlemen*:—As our time is too fully occupied, and as I was given a hearing yesterday, I will, therefore, gladly withdraw the remaining portion of my paper, and thus give more time for the discussion of other papers.

THE CHAIRMAN: Two papers on the subject of Geography have been prepared; one by Miss Carolyn D. Wood, of the Western New York Institution, and the other by Prof. R. B. Lloyd, of the New Jersey Institution. They will now be read.

HOW TO TEACH GEOGRAPHY.

By Carolyn D. Wood, of the Western New York Institution.

Believing that the study of geography begins as soon as the senses are awakened to Nature, and knowing that our pupils have been taught ideas of form, color, and number in the kindergarten, I have something definite to commence work with. The object of all the preliminary work is to teach each pupil to acquire, by his own observation, ideas of *land objects*, of the *forms of water*, of the *atmosphere*, of *plants*, of *animals*, of *people*, and to express these ideas simply and correctly.

I will suppose that the new class that have come to me know nothing of position, and that my work is to commence at that point.

I take a card—one foot square, (this helps the child to form, unconsciously, a correct idea of one square foot,) place a red circle in the center of the card, ask the pupil to observe—remove—replace it—tell what he did. This teaches the child to observe with care, and holds the attention of the class by making them responsible for criticisms.

Each child takes an object similar to one I hold, and imitates what I do, describes the use of other objects, as: "book on table," etc. Draw the circle on the slate. Draw the outline of the slate on the blackboard, and then draw the circle in position on the slate. Paste gummed papers of proper size and color on cards. Copy in free-hand drawing. I gradually introduce more and different forms and variety

of color, and encourage the children to exercise their ingenuity in making symmetrical arrangements.

By placing the circle *on* the card, *under*, *above*, *below*, etc., the pupils are taught to use prepositions. Among the devices I use in this language work are: (1) Place and designate objects; have pupils observe and describe their position. (2) State position in which objects are to be placed; have pupils place the objects in the position described. (3) Pupils place objects as they please, and then describe the positions. (4) Tell a story, and have pupils supply the prepositions.

In the same way I teach the use of adjectives, as top, bottom, right, left, middle, front, back, etc., in connection with card, desk, floor, ceiling, persons, plants, animals, etc. Also teach them to use *near*, *nearer*, *nearest*, far, farther, farthest, very far, and quite near, in giving a general idea of distance.

Having a knowledge of general position and direction, I lead them to see the necessity of having some uniform standard of direction true for all positions.

To teach the cardinal directions.

I point in the North, South, East, and West direction; pupils imitate. I name—pupils imitate.

I walk in N. S. E. W. directions. Pupils imitate and name. I designate objects, as house, tree, etc. Pupils point to each and tell direction from schoolroom. Pupil selects object and tells its direction from himself.

N
 Draw the lines W—|—E on floor, and name.
 S

Teach that the opposite of N. is S.

Half way between N. and S. is E. and W.

Facing the N., S. is directly behind me, E., right side, and W., left side.

Draw the same in other rooms and in the yard. Use a string to mark the figure. Teach the semi-cardinal points in the same way. Apply to the rising and setting sun.

N
 Cardinal points are taught by drawing the lines W—|—E and
 S

naming them. Circle these lines. Name the points. Apply this circumference to the largest circle visible from hill or house top—*horizon*—imagine the lines to be extended until they cut the horizon at N. S. E. W., and call these the cardinal points.

From these establish the semi-cardinal points.

Teach the pupil to find the *North* direction, by using the (1) weathervane; (2) shadow—shortest shadow of a vertical object falls in the North direction; (3) compass.

APPLICATION OF THIS WORK.

As they have discovered the necessity of a uniform standard of direction, so I lead them to see that standard units of measure are necessary, and I have them measure length, breadth, height, depth and width with yards, feet and inches. I have them draw the outline of simple objects, and write the dimensions on their drawing.

DRAWING TO A SCALE.

They measure the room, and find that it is impossible to draw and use the same measures on the slate. Use the blocks to make a plan—1 block, 1 inch square=1 yard, or 1 foot, then copy the plan of the blocks in drawing, then use the ruler.

Draw the plan of the different rooms.

Draw the plan of the school house, other buildings, and the ground.

Draw a picture of the same to show the difference between a *plan* and a *picture*.

Draw the street on a large sheet of paper, and let this map of the city be added to as the pupils are able to describe the streets they know and the places they visit.

As the weather permits, I teach the different forms of water, as :

WATER.

Evaporation.

Vapor.

Condensation.

Clouds,
Fog,
Mist,
Rain,
Dew.

Freezing.

Frost,
Snow,
Ice,
Hail.

And the seasons when they appear. I have the pupils keep a record of their observations. This leads them to see that the temperature of the atmosphere is not always the same, and shows the use of the thermometer. Their records are also to include observations of the winds, as to the kinds and their effect.

The lessons on plants are not to take the place of botany lessons, but are given to bring out the characteristics of the kinds of plants, their adaptation to the climate, and their use to man. The same is true of the lessons on animals and people.

The next step is to teach each child to acquire by using his powers, chiefly of observation and imagination, thorough knowledge of the facts of geography, and to express the knowledge definitely and simply. At this point, he is to take up the subject of geography as a whole, by being taught what geography means. Knowing the whole, must then study the elements or parts of the whole.

The facts of geography are to include a knowledge of the bodies of land and water, of the air he breathes, of the soil, of the productions, and of the people who share this home with him. These objects, which include *all* the geographical objects that can be studied, are divided into two classes : (1) those of observation ; (2) those of imagination.

As it is only by using the knowledge gained through observation, that one can imagine the relations of similar objects in distant, unseen regions, it is, therefore, absolutely necessary that each pupil know first those geographical objects within his range of vision.

Our own yard and immediate neighborhood furnish plenty of natural objects to use as typical features in teaching all the facts that can be taught under the first division. For the second part, or geography of imagination, we use in addition to the natural objects, pictures, stones, models, diagrams, the sand table, and maps.

When the pupil has a distinct idea of the elements which together form the earth, then he is ready to study the earth as a whole. The first step is to learn the form of the earth.

1. We are so near the lake, that from the top of the house we can see vessels coming *in* and going out of port.

2. Many of our boys have sailed on the lake, and can tell us what objects appear, just as they approach land.

3. They know men have sailed around the earth. Illustrate this point, if necessary, by a sphere and toy ships.

4. From the top of the building, objects can be seen that are not visible to those in the yard.

BODIES OF LAND.

Highlands.

Plateaus,
High hills,
Mountains,
Valleys between mountains.

Lowlands.

Plains,
Valleys between hills.

DESCRIBE.

Hills.

Base,
Slope,
Abrupt slope,
Gradual slope,
Summit,
Hill range,
Hill system.

Mountains.

Base,
Slope,
Summit or crest,
Mountain range,
Mountain system,
Volcano.

DRAW.

Plateau.

Valley.

Gorge,
Cañon,
Pass.

Plain.

Swamps,
Marshes,
Deserts.

BODIES OF WATER.

<i>Spring.</i>	<i>Brook, River.</i>	<i>Pond.</i>	<i>Lake.</i>
	Source,	Shore,	Shore,
	Banks,	Inlet,	Inlet,
	Right Bank,	Outlet.	Outlet,
	Left Bank,		Lake Basin,
	Bed,		Lake System.
	Channel,		
	Mouth,		
	Current,		
	Tributary,	{ Slopes,	
	River System,		
	River Basin,		

From these facts, I lead them to know the form of the earth.

I use a large black ball, so they shall think of the earth as an immense sphere in space. The earth rotates.

Poles, points directly under the North Star. Equator, half way between the poles. Tropics, developed by the path of the sun. Time of rotation, once in twenty-four hours—day and night.

Use a globe, on which the land is outlined in putty, to teach the land and water divisions. Lead the pupil to discover that most of the land divisions are grouped together on one side of the earth, and the water division on the other. Have the pupil mark off these divisions, and compare the globe and the map.

Find on the globe the groups of land divisions, and compare as to size. Have some one tell the story of Columbus, and thus lead them to discover the Old and New Worlds, or the Eastern and Western Hemispheres. The pupil must apply this to the earth with great care, by indicating the directions of the Old World from our own, and by telling the means of getting to the Old World. I use the globe to teach: (1) The name, relative size and relative position of the continents. (2) The islands—dividing them as continental and oceanic. (3) Oceans—name, relative size, relative position. (4) General form of each continent. (5) General facts about the coast line—land projections, water projections. Using the relief map—globe with putty outline and pictures—I lead the pupil to find: (1) Two great mountain systems of each continent. (2) To compare these systems, finding the difference in length, width, height, and number of ranges. (3) To call those highlands containing the highest mountains and loftiest plateaus, the Primary Highlands. (4) To call the other great mountain systems, containing lower mountains and less elevated plateaus, Secondary Highlands. (5) Study the relative position, the relative direction, and the name given to the system forming the Primary Highlands of each continent. Facts of value and interest are associated with the highlands studied, and stories and descriptions are read.

Secondary Highlands are taught in the same way.

The sand table and drawing are used to test their mental pictures of the natural features studied.

LOWLANDS.

From pictures, models, relief views, and globes, the pupil is led to locate the great plain of each continent, to name the slopes that form it, and to tell its extent.

FACTS AND STORIES.

Using the same objects, he observes in each continent the direction and length of the great slopes of the Primary Highlands: the outside slopes reach the ocean; the inside slopes meet. From this, he is led to infer the general position of the sources, the general direction, and the relative length of the rivers of each slope, and the body of water into which they empty.

Study the principal rivers of each continent as to source, general direction, relative length, position of the mouth.

Lakes.—Group those having outlets under one head, and those having no outlets under another.

The main features of the oceans are taught by the same method as that indicated in the study of the continents, and indicated below:

OCEANS.

*Coast Waters.**Islands.*

Atlantic Ocean, many inland seas.	{	Many continental islands of great importance.
Pacific Ocean, many border seas.		Many continental and volcanic.
Indian Ocean, many gulfs.		Few of any kind.

CLIMATE.

Where are the	{	cold	}	regions of each continent?
		temperate		
		hot		
		snowy		
		rainy		
		dry		

OBSERVATIONS ON CLIMATE.

Temperature of air.

Pressure of air.

Direction of wind.

Velocity of wind.

Clouds.

Rainfall.

Weather.

Monday A.M.—The air is cold and clear.

Monday P.M.—The air is warm and cloudy.

Climate.

Winter.—Very cold. Frost, snow and ice prevail.

Spring.—Cold. Growing warm. Frost and rain prevail, etc.

SOIL.

*Arrangement of
Materials.*

Kinds of Soil.

How Soil is Made.

Soil,
Sub-soil,
Clay,
Gravel, etc.

FERTILITY OF SOIL.

Minerals.

Metals,
Building materials,
Coal or fuel.

Plants.

(Classify those at home as)

Food plants,
Drink plants,
Spice plants,
Medicinal plants,
Clothing plants,
Building plants.

Animals.

(At Home.)

Domestic,
Wild.

People.

(Races at Home.)

OCCUPATIONS.

*To obtain raw material,
for food, clothing,
shelter, manufacture,
etc.*

Hunting,
Fishing,
Agriculture,
Grazing,
Lumbering,
Mining.

*To prepare raw ma-
terial for*

Manufacturing,
Hunting,
Agriculture,
Grazing,
Mining,
Quarrying.

*To exchange raw ma-
terial and manu-
factures.*

Buying,
Selling.

SETTLEMENTS.—From the places where they live, obtain the terms : village, town, city, and form the government of each from the government of the school.

RELIGION.—Christian, Jewish, Pagan.

SOIL.—PRODUCTIONS.—PEOPLE.—Draw conclusions from former lessons.

NORTH AMERICA.

Having studied the continent as a part of the whole earth, we are now ready to study the continent itself.

1. Positions.—In what hemisphere, regions, and position? From the globe.

2. General Form.

3. Projections of land.

4. Islands.

5. Projections of water.

6. Extent and area.

7. Relief.

(a) Primary Highlands.—Position, plateau, slopes, systems, peaks, valleys, profiles.

(b) Secondary Highlands.—In same manner.

(c) Lowlands.—Same as under continents.

8. Drainage.

(a) Great Watersheds. Great Basins.—Mississippi, Mackenzie, Hudson Bay, St. Lawrence.

(b) Great River Systems.—Mississippi, Mackenzie, Hudson Bay, St. Lawrence, Western Slope, Eastern Slope.

9. Climate.

(a) Temperature.

(b) Moisture.

10. Soil.

11. Productions.

12. People.

(a) Races.—Caucasian, Mongolian, Negro, Indian.

13. Occupations.

14. Commerce.

15. Political Divisions.

16. Study of a county; and in the study of a State.

(a) General relief, general drainage, general climate, most important productions, chief commercial routes, chief commercial cities, kind and seat of government.

MR. WESTERVELT, of Rochester: I am very sorry that I cannot show you the models, the plans of the work, that Miss Wood directed me to bring. They are in my trunk, and I have just paid a man for his labor in searching for that trunk, for telegraphing, and for failing to find it.

HOW TO MAKE THE FIRST LESSONS IN OUR GEOGRAPHIES USEFUL TO DEAF-MUTES.

By Rowland B. Lloyd, of the New Jersey Institution.

It seems to me that in estimating the intellectual abilities of our pupils, we often take too much for granted. We assume that they know more than they really do, and then we go too fast. Lesson after lesson is studied (?) in which we shall find, on investigation, there are words and phrases the pupils never understood. To overcome or

rather to obviate this, I endeavor to make the lesson plain to every member of the class, especially when the class is composed of pupils whose English is very imperfect. For this purpose, I use questions such as you would use in talking with hearing children of five or six years or even less.

In teaching geography to beginners, it is possible and profitable to devote considerable more time to the lesson than at first sight seems worth while. Almost all geographies begin with definitions, and if they are just memorized, they are of very little benefit to the pupil. I skipped them one or twice, and then concluded that they had better go in with the rest. I have managed, I think, to make these lessons both useful and interesting. I will assume that the lesson states among other things, that the circumference and diameter of the earth are so and so, and that the pupils do not know what these words mean, except in a general way, perhaps. I write on my large slate, "What is the circumference of a base-ball?" Their answers vary from a few inches to several feet, showing that some of them had a very hazy idea of the length of a foot. Here was an opportunity to show them just how long a foot is, and I did so with a tape measure. Then I asked, "What is the circumference of your thigh?" "What is the circumference of this basket?" (showing), etc. In every case, I called up a boy to make actual measurements with a tape-line. I do not call up a smart boy. I do not like a very smart boy in my class, unless the others are smart, too. He is generally a nuisance, especially if he is a semi-mute. To show what was meant by the word *diameter*, I procured a ball of yarn and a knitting needle; and calling up one of the boys, I told him to show me the diameter of the ball. Having found it correctly with the help of the needle and tape-line, he wrote on my slate, "The diameter of the ball is three inches." If he did it correctly, I took the ball myself and thrust the needle through it, avoiding the center, and asked him if we could find the diameter in that way. They learned that the diameter must pass through the center. As soon as they got the idea, which they did very readily, and showed that they did by spelling on their fingers a few original sentences, such as, "The diameter of — is —," "The circumference of — is —," I told them how they could readily find the diameter of a tree, or any other round object, by dividing the circumference by 3.1416, and I showed them where they could find the rule in their arithmetics if they ever wished to use it. Months afterward, I found that most of them remembered how to do it, though they had forgotten the figures 3.1416. They knew, however, where to find them.

Now I think this was a profitable lesson. It was a lesson in geography, a lesson in arithmetic, and a lesson in language. It was conducted almost wholly by writing and finger-spelling. When the class came to con it in the evening, it presented no difficulties to them. It was as easy for them to write: The diameter of the Earth is 8,000 miles., as to write: The diameter of a base-ball is about 2½ inches. The other subjects in the lesson were gone over with the same care.

I begin to review almost immediately, and ask all the questions the lesson suggests to me. I put my questions on paper about the size of this sheet, fifteen to twenty questions on a sheet, and when I get sheets enough to go around, I distribute them promiscuously almost every

afternoon. I prefer the afternoon for such work, because they cannot go to sleep over it. To answer all the questions on a single sheet, they must fill both sides of a small slate. If a boy cannot answer a question himself, I let him consult his book. Here is a specimen sheet of questions.

1. What is Geography ?
 2. What does it tell us about ?
 3. Are you studying it ?
 4. How do you like it ?
 5. How far have you gone ?
 6. What geography are you studying ?
 7. Of what does the surface of the earth consist ?
 8. Of what does mortar consist ?
 9. Mention some things on the surface of the earth.
 10. Mention some things not on the surface of the earth.
 11. Can a ship sail on the surface of the earth ?
 12. How much of the surface is land and how much is water ?
 13. Draw a circle and rub out one-fourth of it.
 14. Is there more land than water on the earth ?
 15. Which is the larger, $\frac{1}{4}$ or $\frac{3}{4}$?
 16. What is the shape of the earth ?
 17. What is the shape of this room ?
 18. What is the shape of an egg ?
 19. What is the diameter of a base-ball ?
 20. What is the diameter of the earth ?
-
1. What is the circumference of the earth, in miles ?
 2. What is its diameter in miles ?
 3. Draw a circle on your slate and show its circumference and its diameter ?
 4. How can you find the diameter of a tree which is five feet in circumference ?
 5. Draw a line on your slate which is exactly three inches long.
 6. How many miles can you walk in a day ?
 7. How many miles in a year ?
 8. How many years would it take you to walk around the earth at the equator ?
 9. Did Nellie Bly travel around the earth at the equator ?
 10. What oceans and countries did she cross ?
 11. Is it cold at the North Pole and warm at the South Pole ?
 12. Is the North Pole made of wood or iron ?
 13. Has any body ever visited the North Pole ? Why ?
 14. Which is nearer the equator, the North Pole or the South Pole ?
 15. Does the ice at the Poles ever melt ?

It will be seen that, while some of these questions may be answered directly from the book, most of them have to be answered by the pupil out of his own head, and he has to do considerable thinking and to put his thoughts into language that is his own.

THE CHAIRMAN : There are a few moments left for the discussion of the subjects that have been presented this morning.

Mr. G. W. Cook, of Michigan : I would like to inquire of Mr. Lloyd, at what age he asks those questions.

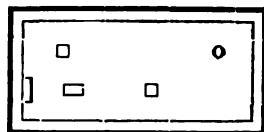
Mr. LLOYD : As soon as they begin to study geography, a class of five or six years' standing.

Mr. HAMMOND, of Illinois : I wish to say with regard to questions, that I have found it quite useful from time to time to induce the pupils to compose questions themselves. I find that a very profitable exercise, and I presume most of you have used the same. I agree with the writer of the paper that there is nothing superior to the proper use of questions, and I think every teacher of experience has found it necessary to resort to a great deal of questioning. I bring into my schoolroom newspaper clippings of the events of the day as they occur, in order that they may write intelligent questions in regard to those paragraphs. If they can write these intelligently, the supposition is that with most of them the paragraph has been taken in, and the ideas have fixed themselves in the mind, at least, temporarily. Of course, we may find a few exceptions. We may find some pupils who may be able to ask a pretty decent question after a little practice, though they may not really sense the paragraph. But, as a general rule, they will understand it pretty well. There are two ways of teaching geography; they both have their defects, and perhaps, as far as I have observed, they both reach, in the long run, equally good results. The first begins at home and gradually spreads out. The other begins on the outside of the circle and comes in. As to which is the better of the two, perhaps, a teacher's own experience with both will be the only thing by which he is to judge. I have seen good results obtained in both ways. I think the point in regard to drawing, especially map drawing, even if at first it be only copying from the book, is well taken. I think there is no better means of fixing in the mind the shapes of different countries, and the positions of the rivers and towns, than the drawing of maps. The precise age at which the pupils referred to in Mr. Lloyd's paper are introduced to geography, is not stated. We infer that they have considerable language, from the explanations that he gave; but, as a general rule, it seems to me that pupils might be introduced to geography in about the third term of their course, as it is in our own Institution in the third year of the course. I do not mean to say that it is always introduced in that year, for the terms may differ somewhat in different institutions.

Mr. GORDON, of Georgia : To succeed well in teaching geography, every teacher should have each pupil furnish himself with a blank book and colored pencils. Have them to draw all the maps and paint them in different colors. It will make them have a better understanding of geography than they could possibly have otherwise without this knowledge. Drawing maps causes any one to locate places more readily. Advanced pupils should recite geography and history at the same time. I have benefitted pupils greatly by having them recite from the two books at the same time. I was pleased to hear that well written paper on teaching geography and map drawing in that study. It is of great importance to deaf-mutes to have them answer questions by writing sentences. It not only makes them have

better knowledge of the lesson, but it assists them in constructing sentences correctly. The pupil is like the mechanic ; he wants to have practical knowledge of his work. For instance, have the class draw the map of South America on the blackboard, and have them write sentences after this manner: South America is south of North America, and Florida is in the southeast part of the United States. You have not only taught the pupils geography, but you have taught how to construct sentences. The pupils become expert in drawing by having them draw maps.

MR. CLARKE, of Arkansas : I think a great deal of the study of geography, but I will not weary you except to make one single point: in beginning to teach our pupils the use of maps, there is a very great danger that they will come to think that this map is a picture, and in fact, some text books say that the map is a picture. In one sense perhaps that is true, but we need to be very careful to train them, so that they will understand that when they travel they are not going to see anything that looks like a map. I am a very great believer in beginning to teach with the use of maps, and beginning with a sketch map of the schoolroom. We teach our pupils that something like that represents a school-room ; a mark in it like that represents a desk ; a mark like that, a stool, etc. They see at once that it does not look like a school-room, that something like that is a chair, or something like that a window. So that when they take a map they see that these are but arbitrary signs. They know that when they travel they would not see anything that looks like this representation marked on the map ; that a little dot which represents a town, but they would not see anything like that. Now, in teaching the deaf, we must bear constantly in mind that you have got to teach them everything. You can never take it for granted that a deaf-mute knows anything, unless you have taught him, and it is important that we bring out the idea, without using the word perhaps, that a map is a conventional picture.



[Referring to the subject of Art, two papers on which had been read by title, the following remarks were made.—SECRETARY.]

MR. JENKINS, of New Jersey : I believe that a mistake is made in thinking that, because only a few of our pupils become artists, therefore, it is not worth while to teach all the pupils art. Our experience in art instruction in the New Jersey School for a single year, during which we have had that branch taught, convinced me that the pupils who have been instructed in drawing and have been only partly successful artistically, have become better artisans ; and I think the experience of this New York Institution, where the instruction in art has been continued for a term of years, and where it has been carried to as high a point of success as anywhere, demonstrates the fact.

MR. DOBYNS, Mississippi of : One of the brightest boys of the Institution which I represent, was, the first year he was in the school, one of the very dullest ; and I, at last, lost all hope of making anything out of him ; I took him to the art teacher and told him, if possible, to make an artist out of him. They

put that boy in the art class, and he turned out to be a bright pupil, and I believe that putting him in the art class opened his mind and let the light in; and if I ever find a dull pupil, I will take him immediately and put him in the art class.

MR. D. D. SMITH, of Illinois: There is too much art work in this country in which we can plainly see that the pupil has not been thoroughly grounded in the matter of drawing. Drawing should be thoroughly acquired; and if this language is well spoken, it is of great value to anybody, but, perhaps, more valuable to the deaf-mutes than those who can hear. In the teaching of drawing, there are two forms of instruction that should be followed. Both begin the same way. We should begin from the study of objects. Let the child work, strongly and broadly from the light and shade, on objects. As the light falls upon one object, it falls upon another, and in this way they can be taught to express form. From this, let them go to more difficult and complex subjects, until they are able to delineate any surface, texture or shape. If you make pictorial artists of the pupils, let them attempt landscapes and figures in an ideal manner. This is, I think, not quite so practical for the deaf-mute as ornamental designing for the purpose of beautifying articles of commerce. Many want to paint, the first thing. It is utterly impossible to paint without knowing how to draw. The productions of these would-be painters show the want of greater attention paid to black and white drawing.

MR. WESTERVELT: I do not know that the attention of the Convention has been called to the exhibition of art work of this school, which is collected in the studios, occupying four rooms on the northern part of the second floor of the school-house, which are filled with selected specimens of the work of the school that have accumulated during the time its art work has been under the direction of Mme. Le Prince and her daughter. The exhibition is surprisingly varied, and the skill and taste in all the work presented is a great credit not only to this Institution,—we all take pride in it. The New York Institution received a medal for the excellence and variety of its exhibition of school art work at the New Orleans Exposition, and it was represented by only a part of what is here now.

At the school at Rochester, technical and free-hand drawing is taught to all grades of the school, but I think probably not more is done in this line than in most other schools for the deaf. Since examining the exhibit made by this Institution, we have an increased desire to do more and better art work. In the simple instruction which we have so far been able to give to our pupils, some of them have acquired considerable skill, and one has shown natural gifts of a superior order; we hope the study under masters will develop this pupil into an artist.

We have a boy who was very much like the one Mr. Dobyns, Superintendent of the Mississippi Institution, speaks of. When first admitted to school, and for four or five years, this boy made but slow progress, as he was of a peculiar temperament and resisted every effort to awaken his interest in what was intellectually attractive to others. Through drawing, it was discovered that he had a penchant for dogs, and as he was encouraged, he drew dogs of every breed,

from wood-cuts, from memory, and from life; he learned the names of the varieties that pleased his fancy, and was interested in all that could be told him about them. From these pictures and names, he became interested in stories in which dogs were mentioned, and from this his reading has gone on through rather a desultory and uncertain channel, until now he is interested in history, and we find the boy has a phenomenal memory for dates.

MRS. J. C. BALIS, of Western Pennsylvania: It has been proved, in my experience, that a knowledge of drawing is a great aid to the deaf and the teachers of the deaf, from an educational standpoint. I do not refer to the second rate landscape and flower painting so many teach. I would willingly give the four years of my time wasted in acquiring such an accomplishment for a good foundation, a foundation upon which we can stand secure and build upwards without fear and trembling. I would teach our pupils to draw a straight line without a quiver, to draw a perfect circle with a single sweep of the hand, without the aid of a string or other such contrivances, and such an ability would be a wonderful thing. They should be taught to know and understand the names of the different lines and curves—circles, half circles, horizontals and perpendiculars—the names of various geometrical figures, and to be able to draw a horizontal line when told to do so, not a perpendicular. Pupils should be able to go into the shop, and, by measurement, draw and design a desk, or a pattern for a pair of shoes. They should be taught to be independent. Give them a good foundation, and let the landscape and flower painting go. The painting before us, the work of a deaf-mute, is the work of one in a thousand. It requires talent. [Portrait of Dr. Peet, by Albert Ballin.—Sec'y.] The deaf, as a class, are quicker to understand and grasp art and to see the art in a subject. They have clearer eyes for lights and shadows and forms, which is but natural, when you consider that their eyes serve them for almost all acquisitive purposes.

Every teacher should have a knowledge of drawing, and be able to draw, at a moment's notice, objects upon the board which may not be within easy reach. It may not be high art. I know little of high art myself. If I have a good foundation in drawing, it is of more value than high art.

Last winter a new teacher, one wholly unacquainted with signs, called me to her room. She was in despair, as she had failed to understand what a little boy was trying to learn from her. I found he had drawn a straight line on the blackboard, on it a circle, in the center of the circle a large spot, with crayon. A little to one side was an impossible revolver, but quite clear enough to the clearer vision of one who can draw. It took but an instant to discover that he wanted to know the name of "that thing they shot at," namely, a target.

The masters of every shop should be teachers as well as workmen. In their rooms the children should learn measurements, for there they are used and practiced. I once spoke to a foreman on the subject, and was asked how he could teach a room-full that an inch was just so much, they might think it was a foot. I told him to teach them individually, not only measurements but also drawings, so they could do their own work unaided.

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drawing, and the other branches are given only to those who desire and have the talent for them. In this generation we need a good foundation for every thing, and I say give it to the deaf in drawing as in all other things.

THE CHAIRMAN : The hour set apart for the presentation of the subject of Articulation has now arrived, and we must proceed to that without delay. I will ask Mr. Greenberger to come forward to the platform.

MR. GREENBERGER : I would suggest, Mr. Chairman, that all those present who have questions to ask, prepare them and write them down while I read my paper, and then, when I have read my paper, the box can be passed around for the questions.

ARTICULATION. (*Concluded.*)

GENERAL PRINCIPLES OF ARTICULATION TEACHING.

By David Greenberger, of the New York Institution for the Improved Instruction of Deaf-Mutes.

The manual of articulation teaching by the late M. Hill, of Germany, contains some general rules which no oral teacher can disregard, no matter what his or her special system of teaching may be. I will mention a few of them.

The first thing the teacher ought to do according to these rules, is to examine the vocal organs of the pupils ; for, such defects as enlarged tonsils, elongation of the soft palate, catarrh, and abnormal condition of the vocal chords, are frequently found among deaf-mutes, and although they do not render articulation impossible, yet they may make it difficult and imperfect. If such defects are discovered, the child should be placed under medical treatment before the instruction is begun.

The teacher's chair should be placed in such a position that the full light of the schoolroom windows falls on her face, so that the pupils may have a good and full view of her vocal organs and their movements—she should not be too far from the pupil, and her mouth should be on a level with the pupil's eyes. This rule seems to be simple and sensible enough, yet it is more honored in the breach than in the observance. We frequently see a teacher standing with her back to the light, and the pupils winking and blinking from the strain upon their little eyes in trying to follow the movements of her lips. If she would let somebody else take her place for a while, and would try to read his lips in that position, it would not take many minutes before she would become convinced of the painfulness of the task.

Another rule of Mr. Hill's is not to let the beginner in articulation practice more than two or three minutes at a time, lest the exercises should become tedious and injurious to the health of the little mutes. It seems to me that it would be well to observe this rule, not only during the elementary articulation drill of beginners, but also in the correction of errors of the pronunciation of older pupils. Strong, healthy

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boys and girls have frequently complained to me of fatigue when I required them to repeat a certain sound, or combination of sounds, a number of times in succession.

Mr. Hill recommends that the pupil be allowed to practice before a looking-glass—a hand-glass is the most convenient—so that he may be able to see his mouth, and compare the movements of his vocal organs with those of his teacher. If I may be permitted to do so, I will suggest that it would do good to some teachers if they would look at themselves in the glass once in a while when they speak to their pupils. For I have seen some mouthing out of *oe's* and *ee's* etc., which was anything but graceful. Such emphasizing and exaggerating of the movements of the mouth make it easy for the pupil to read his teacher's lips, but hinder his progress in learning to read the lips of others who speak to him in a natural manner.

The lessons should be arranged in such a manner that all the pupils of the class are kept occupied simultaneously, but in case of necessity they should be called out separately. Such necessity arises whenever the pupil has to learn to imitate sounds by means of the sense of touch, or when the teacher has to render mechanical assistance by pushing the organs of the learner into the position which is requisite for the production of some particular sound or sounds. If, as in Mr. Hill's system, speaking, writing and reading are taught simultaneously, it is not difficult to keep the attention of all the members of a class. But if speaking and writing are taught separately—the Italian system—and special hours are devoted to articulation drill exclusively, class instruction during these hours is impossible, and each pupil has to be instructed individually. To avoid this, some teachers resort to letting their pupils speak in concert. But the practice is a pernicious one, and ought not to be followed with beginners, nor with advanced pupils. The pronunciation of deaf persons learning to articulate, requires constant watching and correction, which is impossible if a number of them speak together.

Above all things, Mr. Hill urges articulation teachers to arm themselves with a good deal of patience; always to be moderate in their expectations of what their pupils ought to do; and not to become discouraged if the progress of the pupil is slow, or even if, for the time being, all efforts should result in total failure. With your permission I will mention a few incidents which have convinced me of the wisdom of Mr. Hill's advice in this regard. There is now a pupil in my school who speaks with a pleasant, natural voice, and may be called a good articulator. But during the first three years that he was with us, he did not repeat one single articulate sound after his teacher. He would use his voice while playing with the other children, or he would run after hearing persons, and use his voice to attract their attention and make them turn around; but when he was called up in school he would move his lips silently, without giving any audible sound.

In short, he had a good voice and seemed to use it involuntarily, but did not grasp the idea that he could use it at his will. We succeeded at last by resorting to the simple device of rolling up a sheet of foolscap, so that it formed a tube of about one inch diameter, and letting him put his hands on it while the teacher spoke into it. He felt the

vibrations of the paper caused by her voice better than he could feel them by placing his hand on her throat or chest, and he imitated her. I have since found that this little device may be successfully employed in correcting the habit of speaking too loud or in too low a voice. I had another pupil under my instruction once who could not speak a single word after his first two years in school, but subsequently he became a fair articulator and a bright scholar. I have also had experience with pupils who, from obstinacy, would not open their mouths for months at the beginning of the course. All such cases are, of course, exceptions.

THE CHAIRMAN : There is now an opportunity for questions.

DR. WILKINSON : During the two years that you were going on with this boy's lip-reading, you were not leaving his education without progress, were you ?

MR. GREENBERGER : He learned to write during that time.

DR. WILKINSON : In the case of a boy like that, wouldn't you use any signs to help him along ? Would you allow those three years to be altogether wasted, or would you avail yourself of the use of signs, so that it would not be lost time while he was learning to read the lips ? It seems to me that those years were valuable, and that it was a pretty serious loss to the boy. Could you not, by the use of signs, have got him along much faster than by waiting for the coming speech ?

MR. GREENBERGER : Well, Dr. Wilkinson is quite right in saying that three years is a long period of time and very valuable, and the loss to the pupil is considerable, but, in the first place, when I began with that boy I did not know it was going to take three years. I have had some boys make a sound at the very first attempt, others in a day, others in a week, others in a month, etc. I was hoping, from day to day, that that boy would learn to imitate sounds and use his voice. If I had known at the beginning of those three years how long it would take, I do not know but what I might have made provision for him in some other way ; although, considering that during twenty-nine years of teaching I have been following one system, the oral system, and am not prepared to teach by any other system, I do not know, as my time is also a little valuable, whether it would pay me, for the sake of one child, to learn another system or engage a sign teacher for that one pupil.

DR. WILKINSON : Do I understand that your teachers do not know signs and never use them in the development of a child when he first comes to school ? Dr. Bell, and others of the oralists, and I think I have heard you express the same opinion, do not object to signs—that is, they do not object to using what Dr. Bell calls natural signs. Am I correct in supposing that you would use what you call natural signs ?

DR. BELL : It must not be supposed that oral teachers are all of one mind any more than sign teachers, and here is just a case in which you find a difference of opinion. I think few oral teachers would hesitate to use writing as well as speech in developing the mind, and certainly *all* employ natural actions, or gestures, whether they term them "signs" or not. I would go further, and use a manual alphabet as well.

DR. WILLIAMS, of Hartford : I want to ask this question, Whether

during those three years you did not somehow make him understand, you did not leave him at perfect standstill during those three years ?

MR. GREENBERGER : He took part, when there was writing going on ; he learned to write.

The question was asked whether my teachers knew any thing about signs. Well, if Dr. Wilkinson or any one else believes that the atmosphere of our institution is such that a deaf-mute cannot breathe it for a single hour, without breaking out in speaking, he is mistaken. They make signs when they come to the school, and they make signs when they leave the school.

In communicating with beginners who have not yet been taught to speak, the teachers have, of course, to use signs. But we do not use signs as a means of instruction.

DR. WILKINSON : I think you have a different theory from most oralists that I know, and it would be very interesting to the Convention if you would explain it further.

MR. MOSES, of Tennessee : A point comes up in connection with your answer to Dr. Wilkinson. Do you find that your pupils, who understand signs, when they meet one another in after life, talk in signs—converse with each other in signs, or converse with each other in spoken language ? What is the length of your term, the average length ?

MR. GREENBERGER : From 10 to 14 years.

MR. MOSES : Boys that have been in your school two or three years, when they meet in after life, do they prefer to talk in signs, or by spoken language, and which do they generally follow, according to your observation. ?

MR. GREENBERGER : I know that quite a number of former graduates from my school, who spoke to each other by word of mouth pretend to know nothing about signs, pretend to have forgotten about them. We have for years made it a rule in the school, that pupils must speak as soon as they are able, and a good many members of our most advanced classes carry the medals, which they have received for not using signs in or out of school for a considerable length of time.

THE CHAIRMAN : What percentage of your pupils communicate without signs in the daily life of the school ?

MR. GREENBERGER : I have quite a number of them who have worn the medal for four or five years at a time.

THE CHAIRMAN : About how many of your pupils at any one time are wearing the medal given for the disuse of signs ?

M. GREENBERGER : Well, I hardly know ; I should say that all of the highest class.

MISS HAMILTON, of Rochester : I should say as many as half wore those medals, when I was there two years ago.

MR. MOSES : Did you answer my question, or was I unfortunate in making myself understood ?

MR. GREENBERGER : What was your question ?

MR. MOSES : I can easily understand why it is necessary for

you to have rules that your pupils shall not use signs, and why you reward those who do not use them ; but when the school life is ended and the pupils are no longer under the restriction of the rule and the incentive to get the medal, and thereby win the approval of the teachers, when they meet each other, untrammelled by school rules, when they meet each other in after life, do they generally talk with one another in a social and business way by word of mouth, speaking and reading the lips, or do they resort to signs or writing in order to be understood ?

MR. GREENBERGER : They generally talk by signs.

MR. DOBYNS : Does not that prove that the sign-language is the deaf-mute's vernacular ?

DR. BELL : I have given considerable attention to the tendencies that exist in adult life, after school life is over. I think that a knowledge of the sign-language inclines the deaf to talk with one another rather than with hearing persons ; it brings them together and separates them from hearing people ; whereas, a knowledge of speech and speech-reading tends to bring them into personal relations with the hearing. Where you have pupils who know no other means of communication than speech and writing, they find it easier to talk with hearing people than with one another. For, as a rule, hearing persons understand very imperfect articulation more readily than deaf persons understand the perfect speech. There is a greater tendency to make friends with hearing persons and a less tendency to keep up acquaintance with one another than in the case of sign-pupils. They tend to mingle with the world, and be absorbed into society ; whereas, sign-pupils tend to keep together in adult life and form a separate class in the community.

MR. SWILER : Aside from this question as to how much the deaf, who are instructed orally, will use spoken language among themselves, there is another question closely relating to this which we all must recognize, and it is the persistent unwillingness of many deaf people who are still able to use their voices well, and who are the product of our best oral schools, who are the graduates of oral classes, to use the voice in conversation with the hearing and speaking people, when they have acquired such a proficiency that we say their speech is a decided success. They are better able to make themselves understood than by writing, or by using either signs or spelled language ; yet, in spite of all this, they still persist in writing or using some other means of communication than that upon which they have spent long years of labor.

Now, I have the most perfect respect for the oral work that has been done since 1868, but I believe that we have failed largely in practical results, when we take into consideration the amount of work, and the fact that our choicest and best minds have been applied to it.

I wish to ask Mr. Greenberger, if from his years of experience he can suggest any means of obviating this difficulty, so that the results of our labors in the oral work shall have a larger realization.

MR. GREENBERGER : I do not see that such sensitiveness could be overcome by any methods of the schoolroom. You say that these persons will speak well, and from fear that nobody can understand

them, are sensitive ; they do not want to speak, they prefer to write, because they know there is something peculiar about their voices which every one will find out for themselves. I do not see that that can be overcome by any particular method of the schoolroom ; but we can encourage them and tell them that they need not be afraid, even if their voice is a little peculiar. I think that is all we can do.

MR. MOSES : How is it with regard to your pupils ; do they prefer to write when among hearing people ?

MR. GREENBERGER : I have not had a great many such pupils, but once in a while we find a bashful young man who does not want to talk, because he thinks people will find something peculiar about his voice and will find out that he is deaf.

DR. PEET : Don't you think also that these persons are afraid of interrupting a general conversation ; they don't know practical speaking, and so in order to avoid interrupting persons, refrain from speaking.

MR. GREENBERGER : Certainly.

DR. WILLIAMS : We are all aware of the fact that in all hearing schools there are a great many children that are never able to acquire a great deal in the way of education, but we don't think on that account it is not worth while to make any attempt, but we do as well as we can with them. Now if there are those who do not make much progress in articulation, it does not seem to me that should stand in the way of our doing what we can. If a large proportion of them get such a knowledge of speech that with their friends in the family they can carry on a conversation in regard to ordinary things, and at the same time get a fair education, that alone is worth a great deal, even if they don't use it anywhere else ; and if there are pupils who can get so that they can carry on conversation, we should let them have all the practice they can get.

MR. KERNEY, of Indiana : I would like to say a few things about my pupils. One of the pupils connected with me at the college in Washington, Mr. Goldberg, was a very intelligent young man, and was one of the best sign-makers I ever knew. I asked him whether he preferred to speak or to use signs, and he said he preferred to make signs. And there were a number of deaf-mutes that I met when I went to Europe, one of whom could hear some, but he preferred to talk by signs.

I was on an excursion boat with many of my pupils, who could make signs well, and I asked them which they preferred at home among their relatives, to speak or to use signs, and they said they preferred to use signs.

MR. GREENBERGER : I will say this : if all my pupils could, when they leave school, speak as well as this Mr. Goldberg, I should not care if they made signs from morning till night.

MR. CROUTER : I think oral teachers are right in striving to restrict their pupils in the use of signs. To my mind, there can be no question about it. If pupils, under oral instruction, are permitted freely to use signs in their intercourse with one another, and with their

officers and teachers, they will not care to acquire speech; they will not learn to speak except in a very imperfect manner, nor learn to read the lips. If we would successfully teach deaf children to speak, we must speak to them, and require them in turn to speak to us.

The proposition is a very simple one: as far as possible signs must be discarded, and speech and speech-reading used instead, if we would attain the most satisfactory results in oral work. Among the best schools for the deaf, whether oral or manual, according to my experience—and I have carefully observed both systems for a number of years—in the *initial stages* of instruction, involving the acquisition of the simpler forms of written language, there is really very little difference in the methods pursued. In each instance there must be communication between teacher and pupil, and signs, or gestures, or whatever you please to call them, constitute the only means we have for that purpose. All manualists use them, and no oralist at this stage of the work can get along without them. But while the manualist uses signs not only through the initial, but through all subsequent stages of the child's instruction, the oralist, as soon as speech may be used, discards all other means of communication and addresses his pupils orally. He speaks to his pupils and requires them to address him in the same manner, while the manualist uses signs and permits his pupils to use them to the end of the chapter. Now I have no question as to the possibility of teaching a very considerable proportion (I do not believe that *all* can be taught orally) of the deaf to speak and to read the lips, and believing and knowing this, I claim that advantage should be taken of every means to help along the work. I believe signs to be a great hindrance to the best results, and, therefore, I say that they should be carefully and constantly restricted.

In our school in Philadelphia, we have a *sign department*, in which we strive to carry on the work of instruction according to the best manual methods. In this department there are *two oral classes*, the pupils of which are instructed *orally*, but are permitted to associate outside of school hours with the sign-taught pupils, and allowed to go unrestricted in the use of signs.

In a distinct and separate department, we have a number of pupils, who are likewise instructed orally, but who are not permitted to associate with sign-taught children. These pupils, I regret to say it, *do*, to a certain extent, make signs, but they are not encouraged in their efforts, on the contrary they are daily, almost hourly advised and cautioned against it.

We, therefore, have sign and oral pupils associated together in one department, and in another and entirely separate department oral pupils only. I have been a daily witness of the work carried on under these peculiar conditions for several years, and I do not hesitate to say that, while commendable results have been attained in the first instance, the *best articulation* and the *best lip-reading* are to be found in the separate department. The reasons are obvious: in the separate department the influence of the school, of the officers, teachers and pupils, is wholly in favor of oral communication; the pupils are under oral instruction not only during the five hours of active school work, but during all hours of the day; and speech is the general, while signs are the exceptional, means of intercourse. *I do say*, and *I do maintain*

that deaf children under oral instruction must be rigidly restricted in the use of signs, if the best results are to be attained.

In illustration of the value of oral instruction, under what I cannot but regard as adverse circumstances, I may be permitted to relate an interesting incident connected with the instruction of two born deaf pupils in our manual department. These pupils are sisters, and come from an intelligent family in the eastern part of the State. The older one was placed under manual, the younger under oral instruction in the same building. The former, owing to the system of instruction pursued, has not learned to speak; the latter speaks and signs well. Upon their return, in September last, from their usual summer vacation, they were accompanied by their mother, with whom I had considerable conversation concerning their progress.

In speaking of the older daughter, the mother stated that, in addressing her, she always resorted to writing or to signs. Said I, "How do you converse with Nettie (the younger one)?" "Oh, I always speak to Nettie." "Does she read your lips?" "Yes, certainly; she has no difficulty at all, and very often when I want to speak to May (the sister), I tell Nettie what I want to say, and she turns it into signs for me. I wish May could speak and read the lips, too."

Now both of these girls were born deaf, and were sent to the same school; one was placed under manual instruction, and the other under oral. They have progressed satisfactorily in all their studies; but the younger, in addition to having acquired all that the older one has acquired, has learned to speak and read the lips to such a degree that at home her mother always addresses her orally, and actually calls upon her to act as interpreter for her deaf sister.

From this and many other similar experiences, and from a constant observation of the results of the system for a period of over six years, I am bound to say that I most strongly favor the fullest and best oral instruction of every deaf child that may be so instructed, and, as I believe that the free use of signs operates as a serious hindrance to the most successful prosecution of the work, I insist upon their restriction to the farthest possible extent.

DR. WILLIAMS: I would go farther than Mr. Crouter. I believe that signs should be restricted in a sign school.

THE CHAIRMAN: I wish to recognize myself long enough to say that I hope and believe that the time will come when a reasonable, rising degree of proficiency in oral speech, will be a recognized and required condition of full graduation in all our State institutions and in the National Deaf-Mute College, at Washington, D. C. The day of education with no speech in it, is passing away.

MR. MOSES: For one, I have not been asking Mr. Greenberger these questions for the purpose of argument, but for the purpose of getting information. I have felt that he was the man in the profession above all others qualified to help us.

I feel that in the education of the deaf there is one question that should control us all, What is to be for their best good? Articulation is good, lip-reading is good; what is the practical outcome? If it takes time, does the end justify the amount of time consumed, or does it not? What time is required? And from such gentlemen as Mr.

Greenberger, we can find these things out. I want to ask him another question : How much time in your school do you give purely to the teaching of vocalization or speech, and practice of speech and of lip-reading—teaching the theory of reading and practicing lip-reading independent of the mental development? Of course, you try to associate the two, but how much time do those two things consume in the course, the practice, teaching the theory of lip-reading, and then the practice children have in talking? What proportion of your time during the day is occupied in that kind of practice—the practice of lip-reading and speaking? No one denies that oralists improve the children's speech; that we all admit.

MR. GREENBERGER : If I understand the gentleman right, he wants to know how much time I give to the practice of speaking and lip-reading ; my answer is, all the time. If he wants to know much time I give to correcting errors of pronunciation ; that is another question.

MR. MOSES : Well, that makes another mode of practice.

MR. GREENBERGER : Well, we have no special hours for that. We have to correct the pupils' pronunciation all the time, and correct them on the spot.

MR. MOSES : Is half your teachers' time devoted to that ?

MR. GREENBERGER : Oh, no. In the lowest class, the children have to be corrected all the time, but as they advance, it grows less and less, and perhaps in the most advanced class not more than once in an hour.

MR. MOSES : Then what would be your estimate of the proportion of time from beginning to end of the pupil's course ?

MR. GREENBERGER : On the whole, if the child is in school ten years, I do not think it would take more than one year altogether.

DR. BELL : I am sorry we have not heard the details of Mr. Greenberger's " word-method " of teaching. He commences, I understand, by teaching spoken words as wholes, instead of beginning with elementary sounds. This method, if practicable, commends itself as a closer approximation to the natural method employed by mothers and nurses of hearing children, than the methods commonly employed in schools for the deaf. It is certainly the case that we do not teach elementary sounds to our hearing babies, but commence at once with complete words and phrases. I hope Mr. Greenberger will publish his system, so that oral teachers may give it due consideration.

MISS ANNE B. BOYER, of Pennsylvania : I desire to ask Mr. Crouter which pupils show most improvement, and when school life is about closing, are the best equipped for their life in the world : those trained by the oral system, where pupils are not associated, outside of school, with those who are taught by signs ; or those trained by the oral system and associated, out of school, with pupils taught in the sign department ; or those instructed wholly by the sign system ?

MR. CROUTER : That is a very difficult question to answer. In our separate oral department we have not, as yet, had what we term a graduating class ; we have had no pupils take the full course of ten years, and, therefore, it is difficult at this time to express a decided opinion as to the relative progress made by the pupils of the two de-

partments. I believe, however, that while the progress of a pupil under oral instruction may be slower than that of a pupil under manual instruction during the first part of the course, and its education in general more limited ; and while also, during the full course, it may not be able to take up and pursue so many branches of study ; nevertheless, at the end of a ten or twelve years' term, if successful work has been done, it will be found to be much better equipped for the activities of life, simply because it has come into possession of a much more convenient and general way of communicating with the outside world. This is a hearing world that we live in, not a deaf world, and the more fully we can prepare our pupils for active participation in all its duties, the more fully are we meeting the responsibilities that rest upon us.

I must confess to much surprise at the progress and attainments of our oral pupils. The time was when I was as skeptical as anybody well could be in regard to oral instruction, but candor compels me to acknowledge that the more I see of it the better opinion I have of its merits.

MR. SWILER : Is it not true that the superior attainments of many of the pupils of the oral school are somewhat due to the fact that many of them are semi-mutes, and would this not have a strong bearing on the point at issue ?

MR. J. C. BALIS, of Western Pennsylvania : In my experience, I have found that where it has been impossible for me to read speech from a front view of lips, it has often been more than easy to read from the profile, or from the shadow of the profile thrown fully, or at almost any angle, upon a white surface, provided the lips were beardless or *sans* moustache.

MR. MONROE, of Michigan : While I disagree with the doctrine that the use of signs should be entirely abandoned by the deaf while in school, I believe that some of the theories of those who advocate this are correct, and could be accepted by all teachers of the deaf with profit. In the school with which I am connected was a pupil, who, as a storyteller by signs, was the most popular pupil in the building, yet his knowledge of English was so limited that he could scarcely put an idea into language that could be understood. Here was a boy brim full of ideas concerning general topics, yet, after he left school, no one on earth could find out that he had this knowledge, except through the use of signs. Such pupils are reported from every school where signs are the general medium of communication.

The proposition made by prominent educators is to spend none of the time in school giving pupils ideas in signs ; and Supt. Crouter says signs should be used but little in oral teaching. I would add that this latter remark applies equally well to any kind of teaching. We waste time filling pupils full of ideas by means of the sign-language. The time in school should be spent in presenting fewer ideas in English language simple enough for the comprehension of the pupils ; they will then grow in English. Compel pupils to wait for ideas until they can get them in the language from which all their ideas and information must be obtained after they leave school—the English language. If pupils have a common language for communication, other than the English,

they will be in no hurry to learn English, because they must go among people outside of the institution before they really feel the need of a good command of the English language. Oblige pupils to refrain from using this sign-language, which will be of no use to them after they leave school, and then the need of a knowledge of English, which children otherwise would not feel until after leaving school, would be felt by them while in school where the need could be supplied. Use signs to illustrate language—not to give knowledge—and do not, for any purpose whatever, substitute for the language which you are teaching, a language which you do not care to teach. If, after the pupils have finished their education, they wish to use signs, from which they undoubtedly derive much pleasure, well and good, but do not suffer them while in school to let the pleasure and convenience to them of the sign-language deprive them of acquiring the fullest familiarity and fluency in the use of the English language.

DR. PEET : I wish to call the attention of the members of the Convention to some publications from the house of D. C. Heath & Co., of Boston, who have made a specialty of books on education, and of devices for illustration. Among them are a number of boxes of cards for teaching mental arithmetic, which have extraordinary merit, and of which specimens will be found on the table. They have a set of "*Nature Readers*," which I think admirable, and which are as good matter as I ever saw for either young deaf-mutes or for hearing youth. They have also an excellent Primer by Miss Sarah Fuller, of Boston, and Charts, prepared by her, for Developing Speech.

Their agent, Mr. Wilson L. Gill, whom I take this opportunity to introduce to the audience, will be very glad to receive any orders from the members of the convention. I must confess I have been very much pleased with the books he is exhibiting. "Hyde's Practical Lessons in the Use of English" is not only particularly worthy of examination, but is a good type of the character of the publications of his house. There are here quite a number of D. C. Heath & Co.'s catalogues, to which you can help yourselves. I am moved to say this simply in our own interest, and not in that of Mr. Gill or the publishers he represents.

THE CHAIRMAN : The time for adjournment having arrived, a motion to that effect will be in order.

[Motion to adjourn offered, seconded and carried.]

WEDNESDAY AFTERNOON, AUGUST 27.

President Wilkinson called the Convention to order at 2:10, and requested Dr. Gillett to open the proceedings with prayer.

MR. WESTON JENKINS, of New Jersey : I move that the reading of the minutes be dispensed with.

THE PRESIDENT : It has been moved that the reading of the minutes be dispensed with. All in favor of the motion will manifest it by raising the hand. All opposed, the same sign. The motion is carried.

DR. P. G. GILLET, of Illinois : I move the following resolution :

"*Resolved*, That the President and Secretary of this Convention be requested to confer with the officers and managers of the American Book Company upon the advisability and importance of including, in some of their publications, a print of the Manual Alphabet, with a short chapter upon its history and use, and the great convenience and helpfulness it would afford in every department of social, domestic and business life, among hearing as well as among deaf persons."

THE PRESIDENT : You have heard the resolution, what is your pleasure? All in favor of its adoption will manifest it by the usual sign. Those opposed, by the same sign. The resolution is adopted.

DR. E. M. GALLAUDET, of Washington : I am requested by the Standing Executive Committee, to whom was referred a resolution directing the appointment of a committee of three to arrange for the Literary Programme of the next convention, to ask the authority of the convention to make that committee five instead of three.

It was found, on consultation, that the number three seemed rather too small. It is the desire of the committee to bring in outside aid, and I therefore offer a motion that the committee be given authority to make the number five instead of three.

THE PRESIDENT : It is moved and seconded that the committee to arrange for the Literary Programme of the next convention, appointed yesterday afternoon, be increased to five. All those in favor of the motion signify it in the usual way. Those opposed, in the same way. The motion is carried.

THE PRESIDENT : The first exercise upon our programme for this afternoon, is a paper upon "Language Teaching," by Prof. J. W. Swiler, of the Wisconsin Institution.

MR. SWILER : *Ladies and Gentlemen* :—I have been asked to speak to you this afternoon on language training, illustrated by specimens of work from the school for the deaf of which I am the Principal.

I have consented to do this with some hesitation, knowing that there are many professors of this art before me, who are better able to speak of it than myself ; moreover, my observation and experience have been in a single line, and, in the midst of a busy life, I have not found time to present this subject as I would wish to do.

LANGUAGE TEACHING.

By John W. Swiler, of the Wisconsin Institution.

The subject of education is scarcely wider than our topic of to-day—Language Teaching ! Are not the two almost identical ? Does not the language, the speech of any one, show the extent to which that person's education has been carried ? What more do we need than to hear people talk, or to see what they have written that we may judge of their attainments ?

All other branches of school work are subordinate to language, which is the first, the last, and constant study—from the A, B, C, to

the end of the commencement address. They, who secure an extensive and exact use of language, are educated people ; all who fail in this, whatever their other accomplishments may be, are not admitted to the charmed circles in which true refinement dwells, where ignorance of other sciences may be overlooked, but gross errors in speech never tolerated.

I would rather undertake to teach all else within the range of a school course, than to be held accountable for reading, writing, grammar and rhetoric. We, the members of this convention, are to-day facing the problem how best to teach 10,000 deaf children to represent the highest scholarship, and the most complete development of this marvelous Nineteenth Century.

Do we know *how* to teach a correct use of the English language ? Do we *succeed* ? Are our pupils good readers or good writers ? Do the results satisfy us, or our pupils ? If not, why not ? These questions every teacher should ask and answer. By virtue of our position we profess to be ready and able to apply certain methods of instruction which must stand or fall by the results obtained. Do we employ the strictly grammatical one ? Is the scientific method our choice, or have we come to see that the natural method is the better way, and a conformity to Nature's laws the most positive assurance of success ?

For the first : laying down rules and formulæ to measure all things with, we have little use.

Of the scientific method, which would analyze and explain every possible use, meaning, and relation of each word, before the next is taught, both teacher and learner have long since wearied ; a living tongue requires something more ; so we come to the third, or Natural Method, which takes up the salient features of child-life and applies them in their ceaseless activity to objective presentation of material forms, and also to writing about actions till a basis in good form for human speech is constructed.

Language—the intelligent expression of thought—is limited only by the bounds of finite minds. Its mode of utterance may be by voice, by gesture, by a look or word ; but, whatever its form, it must be the animated expression of a thought.

In primitive life, the gesture-language might be used and understood by all alike ; in its ideographic clearness it was incapable of ambiguity. But the conventionalities and varying wants of humanity lead us far away from these simple utterances to a state of society, calling for not one, but many tongues.

Of speech, as of writing, one has said, "No great thing was ever, or will ever be, done with ease. Shakespeare, we may fancy, wrote rapidly ; but not till he had thought intensely." "Neither was Milton, one of the mob of gentlemen that write with ease." Goethe also tells us "he had nothing sent him in his sleep, no page of his but he knew well how it came there."

So we may not expect results without effort, nor feel discouraged that our brightest hopes are not often met.

In the first place, language teaching requires personal contact with the every-day life of children, in order that their ability and the range of their desires may be comprehended, and that teachers may not work far above the plane on which their pupils move, where much is taught

and little learned. The teacher needs to know the learner's mind, especially its power of expression. In signing, teachers of the deaf must know the philosophy of a sign ; the reason for its being ; what it is, in order to its clear and forceful use : as mind, idea, know, don't know, forget, remember, think, understand, wisdom, knowledge, all belonging to a group of signs that cluster about expressions referring to the intellect ; or these, the generic signs for man and woman—thence the sign for sex distinction, so all teachers need to know the entire import of words to express their full significance. President Eliot, of Harvard, says : "I may avow, as the result of my reading and observation in the matter of education, that I recognize but one mental acquisition as an essential part of a lady or gentleman, and that is an accurate and a refined use of the mother tongue."

Pure idiomatic speech is, at once, a mark of refinement, an indication of an educated mind, and, at the same time, the stamp or seal with which the best society marks the tongues of those who receive her highest honors. The teacher that produces plain and fluent speech, or clear, concise, written language, deserves profound respect ; the course of study by which it comes is worthy of imitation ; and the student that talks and writes well, is the one best fitted for life. A school is judged by the manner in which its pupils use words in reading, writing and speaking. Their speech is the exponent of the work, indicating a high grade when it is the pure, strong, diction of old Anglo-Saxon.

Carlyle says, "Underlying all speech that is worth any thing is a silence which is better," and so, back of the audible, or visible speech, is that with which our art must have to do, the mind, the character, which forms the speech symmetrical and euphonious, or abrupt and harsh. This living tongue is our most efficient agent in making language attractive ; as the soul looks from the eyes, and the heart speaks from the lips, to that extent may the teacher expect to inspire the best endeavor toward a higher and better style of work. Do not be alarmed at the imitative faculty in your pupils, or in a disposition to memorize ; do not be afraid of having others copy you ; we teach by example rather than by precept. The refinements and amenities of polite speech come from contact with, and imitation of, people. No solitary person talks well ; the art of composition is not Nature's gift, but must be acquired. In schools for the deaf, it is practice makes the ready hand. Children learn to write by copying, as they get speech by speaking. At first, there are few errors, for little is attempted, but as the stock of words grows, the chance of making mistakes enlarges in an increasing ratio. At first, there is only an infrequent use of words, no thought to call for them ; but, when a mind is really waked up, it goes ahead, and instead of words looking for ideas we have thought groping around for words. In such cases, we have frequent examples, in the middle grades, of ingenious pupils trying to form new words, when the proper word is wanting, or making any one of numerous errors in speech not peculiar to the deaf alone, but common to all who learn our language as a foreign tongue. As for example, in such expressions as these, the writers fondly imagine their thoughts are well expressed, although they have made use of nouns for verbs.

"Herman can *stilts*, and walk on the mud, and ran it and fell."

"The boy is fond of *bees*?"

"I want to *photograph*."

"He *mercied* them."

"I *grated* her."

"She *lunged*," breathed hard.

"He *eloquented* them."

"She *lonesomed*."

"The pupils *funeraled* to the cemetery."

"*Sewing-line*" for seam.

"*Brick levels*" for pavement.

"*Small pozers*," those who have had the small-pox.

"The naughty child *disgoods* the good children."

These are not furnished as in criticism of the teacher, or of a system, but to illustrate a class of errors into which deaf children of 3 to 4 years' standing in school may fall in attempting to express ideas beyond the range of their vocabularies. Many amusing and interesting specimens of composition might be cited from this class of persons, but one or two will suffice for this occasion.

A young man in Pennsylvania writes me :

"DEAR SIR :—Sometimes we are usual all well, and the Editor did not send my subscription of the *Times* lately. I always wait to get the *Times* not any you are better tell him to be faithful send my *Times* in regular time in every weekly. I paid of the *Times* it cost \$.75 for the *Times*, he must be honest to send it to me as good. I did not get two times in papers in January. What was the matter with me for not sending? There are many sickness in *La Grippe* everywhere, I hope you are glad to hear about me. Next month will be approach by Feby, it will be short day in this year. Washington will be birthday on the 22d of this month, all the pupils and teachers must be honor for Washington's birthday I have no news of it Good bye."

The deaf are taught to write correctly; only those familiar with their isolation in the world of speech, can realize how much thoughtful practice that implies. If, in some cases, they fall below the measure of highest attainment, that is but the common lot of many. In teaching speech, we find that *perfect* vocal enunciation is about as hard for them, and as near the unattainable, as beautiful penmanship for the blind. The resonant sound of words that suggests so much to us has no effect on them, even when spoken language is understood, though a great aid in general conversation, it is little more than a string of labial signs to them. Hence, the use of gesture-language, which visibly attracts, interests, excites and stimulates the deaf as the address of eloquent speech does the hearing ear. So the teacher must vivify speech and make it interesting; touch the senses and draw out responsive thought. We know that language cannot be learned from books. We may read French, or German, for years, without knowing either language when we hear it. It is spoken or gesture-language that constitutes a tongue, in which the voice, inflection, and quality of tone are essential elements. The teacher that teaches language well, will read and speak fluently. The best teachers of the deaf will use signs with graphic force and touching inspiration.

Writing, alone, will not confer that power and readiness requisite to a free delivery. It is too laborious, unnatural and slow. Teach children of any age to speak correctly by talking to them, to write by writing to them and for them in their immediate presence, so that the genius of your action may be felt. A deeper impression will be made by your writing, while their eyes are on you, than by any thing which you may have written before they came in. Write often, for your pupils, matters of fact or fancy, items of news, or general information. We need to lead them to higher flights by specimens of graphic, or instructive composition; for as children are more easily led than driven, the teacher, with charming voice and ready pen, with graceful gesture and soul-lit expression, will lead, by example, to an order of attainments that only the desire of noble emulation can secure. The pupil rarely surpasses the teacher, and we should not be satisfied till the best of them do what they are taught about as well as any one could do it. Our best pupils should be able to do something more than barely make their meaning clear, and we may justly expect them to write with discrimination, grace and ease, commensurate to their opportunities. We ought to require a higher and better form of rhetorical. Once a month, or once a quarter, does not have much effect on composition writing, and the *sentiment* in many schools which accepts "most any thing" in the form of an essay, however hastily and carelessly thrown together, needs improvement. Children who say, "Yes," for Yes, sir; "Naw," for No, sir; "Gimme pertaters"; or, "Lemme go"; are but expressing the effects of neglect or ignorance. So pupils who are allowed to go through school retaining uncorrected errors of speech, are, perhaps, impeded for life by this clog upon their tongues. Of course, we have to struggle with defective speech previously formed, but, as the local dialect betrays ignorance of urban speech, so a child's faulty speech marks his home and school training defective. The teacher of language enjoys the privilege and pleasure of making his art attractive, by using the choicest gems of English composition to illustrate the force and beauty of literature, in frequent readings, or addresses. Who has not felt the power of words, or been moved, by the pathos of song or story, to better work. You who know so well the hours in which children grow weary of school, when the teachers' force has lost its edge, will not omit this refreshing use of signs, nor fail to draw from the treasures of the past to enrich the present. Nor will you, of the oral work, be disposed to find fault with teachers of the deaf for their employment of the graphic sign-language, in instructing, amusing, or entertaining during the passing hours of the day. In every sense of the word, the teacher makes the school; but especially the language of the school. As an outline of the course in Language at the Wisconsin School for the Deaf, I would say first, in general, that our teaching is a natural, colloquial, familiar method, suited to the wants and capabilities of young children. Letters and words are not usually taught as such, but as parts of a sentence and as expressions of an idea.

First: the concrete, the active, the present, is used. In illustration, or demonstrating everything must be seen. Pupils assist at every step: the whole work of the class is done by every pupil many times. The peculiar excellence of our work may lie in this fact, that we re-

quire, daily, the whole lesson in writing from every member of every class. The first day of school, 20 boys and girls, from 8 to 12 years of age, are gathered in a room. Handsome, bright and strong, nameless themselves, surrounded by nameless things, so far as they know, for they are without words or any form of connected speech. Habits of attention, order and obedience, are yet to come. They know not what may be before them, and have little patience to wait for future events. And here they are to begin an education at the beginning. Think of it, you teachers of Primary schools, whose pupils are well supplied with words before they enter school, and come to you to learn the form of words already familiar to the ear.

Without common language, it is not always easy to seat a class like this, nor to get them all out of their seats just when wanted; but they somehow come to know that one must command, and the rest obey, so that, in a very short time, attention and obedience follow.

The first step in written language, is to know that names or words attach to objects; heretofore speech has been a mystery, and writing beyond their ken. A book or box, a hat or cup, is shown, and, at the same time, its name is written on the slate till they are able to connect the object with its own name, by showing the thing when its name is written, or writing the name word when the object is displayed—*i. e.*, to know that b-o-x is box, not book, and the reverse. As soon as one or more words are known by the brighter members of a class, all go to the slates and writing begins, some needing the teacher's hand to guide theirs, others, with more nerve, forming the words alone. Nouns first, then verbs, in the present, mandatory form: Shut the door, Open the desk, Lift the chair, Bring the box, Come to me, Go to a boy, etc. In this way, thirty or more nouns may soon be learned, from objects and pictures, and the work on simple sentences begun. Personal pronouns, with the active, transitive, verb in the past tense, soon follow.

FIRST YEAR.

Nouns.—Objects in class room; articles of dress; articles of food; articles of furniture; parts of the body; names of most common animals and birds; divisions of time—morning, noon, evening, forenoon and afternoon; the articles, *a*, *an*, and *the*; to be taught with these words, also the plural form of the words. About one hundred and fifty.

Adjectives.—Such as good, bad, young, old, sweet, sour, hard, soft, wise, stupid, weak, strong, pretty, homely, light, heavy, quick, slow, etc., etc.; colors: black, white, yellow, green, red and blue. Numeral adjectives to twenty inclusive. In all about thirty.

Pronouns.—I, you, he, she, it, in all cases and numbers.

Verbs.—To be, in present and past tenses, and verbs that express simple action. Seventy-five.

Prepositions.—In, into, out, of, on, over, under, by, for, off. Fifteen.

SECOND YEAR.

A thorough review of first-year work.

Nouns.—Names of the parts of common quadrupeds, birds and fishes; names of implements in common use about the house, barn, farm, etc. "Miss Sweet's No. 1, Second Series."

Adjectives.—Continued, together with : This, that, these, those, many, a few, several, some.

Pronouns.—Simple questions with : Who, what, where, can, have and do.

Verbs.—The infinitive mood with to ; simple and compound actions ; may and must.

Adverbs.—Not, often, never, sometimes, now, soon, very, much, etc.

Prepositions.—From, at, through, of, before, behind, around, after.

Conjunctions.—But, and, or.

Simple questions : Whose ? which ? when ? will ? and may ?

THIRD YEAR.

Nouns.—The different classes of artisans and the articles made by each ; the time of day ; the seasons. "Miss Sweet's No. 2."

Adjectives.—Simple comparison ; also, each, other, another, one, every.

Pronouns.—Myself, himself, herself, and their plurals.

Verbs.—Present, past and future tenses ; the infinitive and imperative moods ; thorough drill on will, would, could, and can.

Adverbs.—Continued.

Prepositions.—Without, among, along, near, above, below, within.

Conjunction.—Because.

Simple narrative and elliptical exercises. Action and picture writing.

FOURTH YEAR.

Nouns.—Continued : Somebody, anybody, nobody.

Adjectives.—Comparisons continued.

Verbs.—Active and passive voice ; exercises in the indicative, infinitive and imperative moods ; have and had ; may and might ; shall and should. "Miss Sweet's No. 3."

Adverbs.—Time, place and manner.

Pronouns.—Relative.

Conjunctions.—If, either, or, neither, nor, when, while, since.

Prepositions.—Completed.

Elliptical exercises. Descriptions of actions, pictures, persons, animals and things. Historical sketches. Journals. Stories. Letter-writing.

FIFTH YEAR.

Nouns, Adjectives, Pronouns, Adverbs, Prepositions, Conjunctions, continued. "How to Talk." Special drill in active and passive voice ; participles. Action and picture writing. Historical sketches. Natural History stories. Journal. Stories.

SIXTH YEAR.

Sentence writing. Participial constructions, continued. Natural History. Narrative and descriptive composition. Journal. Stories. "How to Talk."

SEVENTH YEAR.

Sentence building. Analysis, using diagrams. Participial and ad-

verbal phrases. English Composition. "How to Write." Reading : "Little Men and Women."

EIGHTH YEAR.

Composition. "Swinton's," or "Barnes' Language." Thorough drill on connectives. Reading : "Harper's Fourth."

NINTH YEAR.

Composition. "Patterson's Grammar." English Literature.

TENTH YEAR.

English Literature.

This is, in brief, our course in "Language." These the steps by which we come from the initiation to the last lessons. As the scholar's vocabulary is enlarged, you will see that instruction is given in the logic and grammar of the sentence till the relations of words and their independence is understood, but the science of grammar is not brought into prominence till, in the last years of the course, after an extensive knowledge of the art has been obtained. Finally, Language is a habit, and Language Teaching requires the utmost endeavor of the most versatile and ingenious.

THE PRESIDENT : The next paper, on "The Value of a Programme," by Miss E. R. Taylor, of the Philadelphia Institution, will not be read, as, owing to the crowded condition of our programme, Miss Taylor desires that it be withdrawn. It is suggested, however, that the paper be ordered printed in the report of our convention.

MR. C. W. ELY, of Maryland : I move that the paper, "The Value of a Programme," by Miss E. R. Taylor, of Philadelphia, be printed in the proceedings of this convention.

THE PRESIDENT : You have heard Mr. Ely's motion. All who are in favor will raise the hand. All opposed, the same sign. The motion is carried.

[In accordance with the foregoing motion, Miss Taylor's paper is placed in the regular order.—SECRETARY]

THE VALUE OF A PROGRAMME.

By Elizabeth R. Taylor, of the Pennsylvania Institution.

The value of a programme of daily work is greater than many are willing to admit. Being a systematic arrangement of the work to be done during the day, it has two main claims on the attention of every earnest teacher ; it compels preparation by the teacher ; and, by its variety, insures attention from the pupil. It also counteracts the tendency which too many of us have, of devoting more time to one subject than to another, and induces symmetrical growth and harmonious development.

Some one may say, "But it interrupts. Just as I am at the most interesting point in the lesson, the programme calls for a change of subject."

Landon tells us that one of the commonest mistakes is to imagine that, by giving twice as much time to a subject, a child will make twice as much progress. A pitcher holds a certain quantity of water—any more that is poured into it, runs over. So a child can imbibe, understandingly, only a certain amount of knowledge, and any more that is poured into his unwilling mind, runs to waste.

A lesson should never be longer than from 30 to 45 minutes, and if the teacher has fully prepared the lesson before going to her class, she will find that she has quite enough material for her pupils to assimilate and make really their own.

As for the interruption, it may be just what is needed. How many of us have seen a dull, listless class, passively gazing at a bright, active teacher, who is carried away by her own industry and eloquence. The class was satiated, perhaps, some fifteen minutes before, and during this time the teacher has been doing all the work and unconsciously pouring water into the overflowing pitcher. How much better it might have been, had she been interrupted while the pupils were interested; and with how much greater interest and success would the class have taken up the subject at another time. I am inclined to think that, often, the best time to leave a lesson is when the class is on the *qui vive* of enthusiasm and expectancy; then a certain impetus has been given and the pupil is stimulated to continue the investigation on his own responsibility; and we all know that self-obtained knowledge is much more educative than that given by the teacher. It is development, not acquisition, that we are aiming for.

Some one has said, "Change is rest;" and if the proper change is made, it is surprising to see with what zeal the pupils will begin a new lesson. Exercises which require the same amount of mental effort, should not follow each other. In the arrangement of a programme, the teacher should be careful that the different faculties are brought into requisition. Mechanical work should alternate with the brain work.

The teacher should also be careful to place those exercises requiring the greatest mental effort early in the session, or immediately after periods of rest. It is unnatural for young pupils to give continued attention to a subject for a very long time; and if we demand it, we are only cultivating that listless, languid appearance of attention, which is so exasperating to an intelligent teacher.

I have in my mind two teachers who are equally faithful and anxious for the improvement of the pupils under their care. One goes before her class with a well-defined plan of work, sanguine of success and eager for its accomplishment. Go into her schoolroom at any hour, and the bright, happy faces of teacher and pupils give one the impression that it is playtime. The other, a good, conscientious, earnest worker, is willing to endure any amount of labor, but wastes her energies on hap-hazard work. The pupils are restless and discontented, the teacher exacting and irritable, and at the close of school utterly incapable of preparing work for the following day, because her nerve power is completely expended.

Every minute of the school session should be provided for and uti-

lized. We must remember that the pupil is not so idle as we sometimes imagine. When the teacher is obliged to cast about and think what to do next, it is more than probable that the pupil's mind is undergoing a similar operation, and he is casting about and mentally revolving what mischief he can do. The chances are that the pupil of such a teacher may arrive at a course of action first; then the teacher's mind is distracted and several minutes are consumed in admonishment and reproof. The class, perhaps, sympathizes with the offender, and, seeing the teacher uncertain and capricious, it is impossible for the pupils to maintain composure, an aggressive feeling is engendered, and the class is thrown into a state of watching and waiting and preparation for the worst. The teacher claims the right to freedom of action, but the very appearance of the class is suggestive of restraint, and the obvious utility of order in the arrangement of work is made more manifest. If a child is kept busy, there is seldom occasion for reproof or punishment; and a teacher may be gauged by how little or how much punishment she administers.

A programme has a good moral effect on children. It teaches order, method, and punctuality, and, "by the cultivation of the force of the will in mental concentration," helps to form character.

No teacher can be successful without giving due regard to individuality and inspiration, and in making out a programme for the day let your individuality have full scope, and in the schoolroom, while adhering to your plans, never neglect an inspiration.

We all know that all children imitate their teachers more or less, but the deaf copy to the most minute detail; then if the teacher begins her work totally unprepared, depending entirely on the accident of the moment for inspiration, how can she object if the pupils show the same spirit? While at school, the habits of life are formed; and if we neglect to plant good seed, what can we expect in the future?

In conclusion, let me make an appeal for these little people. Don't think of them as "*material*" out of which we are to make our reputation as teachers, but rather as God's children whose characters we are helping to form, whose lives we are moulding for good or evil, and remember that Language is not the only thing which we are trying to inculcate into their active, willing minds.

THE PRESIDENT: We will now listen to the paper prepared by Prof. W. E. Taylor, of the Nebraska Institution, "Shall Speaking Pupils Receive Instruction in Sign Classes"?

SHALL SPEAKING PUPILS RECEIVE INSTRUCTION IN SIGN CLASSES?

By W. E. Taylor, of the Nebraska Institution.

Most of the pupils in our institutions belong to one of four classes, which, to borrow the classification of another, we may designate as:

1. The toto-congenitally deaf.
2. The quasi-congenitally deaf.
3. The semi-deaf.
4. The semi-mute.

For the purposes of this article, the second of these classes includes only such pupils as have lost hearing before speech was gained, and the third includes those congenitally mutes in whom there exists a little hearing, however small. The fourth includes those who have lost all hearing, but retain speech. Added to these are some who still retain a part of their normal hearing and their speech.

It is evident that the first three classes enter our schools on a par. There is no difference in the mental capacity of the congenitally deaf, of the child that became deaf before language was gained, and of the class we now name semi-deaf. These three classes enter our school in the same condition—without language. The congenitally deaf has never heard anything. The quasi-congenitally deaf lost his hearing before anything was gained by it. And the semi-deaf has never heard enough to distinguish words, in the vast majority of cases.

To all of the third class, the semi-deaf, all will, I think, admit that we should give speech, and, if possible, develop and make available the latent hearing possessed. And even the most conservative teacher of the deaf will probably admit that it is possible to give speech and speech-reading to at least some of the other two classes. No one could be so blind to the logic of facts as not to admit this. The best speech-reader of the Nebraska Institution belongs to the second class. Here then, is a new class, consisting of the semi-mute, the semi-deaf, and some congenitally and quasi-congenitally deaf pupils, that must, if we would do our duty, be taught speech.

But how is this to be done? Shall they receive their education in sign classes and then be sent out for half an hour, or an hour a day, of speech and hearing drill, and then go away and forget all about it until the next day? Will so short a space of even the most skillful articulation teacher's time compensate for, or even approach, Nature's process of teaching the child with all his senses? The child with normal hearing learns to speak from constantly hearing the speech of others, and trying to reproduce it. The chatter that it constantly hears, makes an impression on the hearing centre of the brain, and by repeated efforts the child reproduces the sound heard. And the more frequent the repetition, the more distinct the impression and the more successful the effort at reproduction. And this process of repetition goes on, not thirty minutes a day, during the school term, but sixty minutes to the hour, for twelve hours a day, and three hundred and sixty-five days to the year. The nearer we approach this natural process, the greater the repetition of the language taught, the more frequently the child can meet in speech the words it has tried to learn, the faster will be its progress in speech, in hearing, and in speech-reading. What Prof. Storrs said of sign work, is just as true of oral and aural work: "Practice, practice, practice, repetitions and unremitting practice, with every possible reinforcement of the pupil's interest by every most skillful device—this is the keynote of all successful deaf-mute teaching." With all the possible repetition that the teacher is able to give in the whole five or six hours of the school session, he cannot even approach the repetition that is given to the child with all his senses. In order to accomplish anything for the deaf child, the hour of articulation or hearing drill should be the basis of the day's work in language, and through his ear, or eye, or both, he should be

made to meet the new words, just as often as possible, in sentences with words already learned. In fact, we think, as far as possible, every exercise should directly contribute to the pupil's progress in hearing, in speech, or in speech-reading. He should, as far as possible, get his information in speech, and have his recitations and language work in speech. But it is manifest that this cannot be done in "sign classes." The teacher of "sign classes" must adapt his methods to the sign pupils.

If the presence of speaking children in sign classes is not best for the speaking children, it is likewise disadvantageous to the "sign" children. I think that I have shown that both classes need the same work, except some of the semi-mutes, but need it given in a different way. Now, if a part of a class is removed for half an hour or an hour, the teacher must continue to teach those remaining, and when the speaking pupils return, he must necessarily go over the same ground for their benefit, while the other pupils are resting on their oars or doing something else to put in the time. No wonder that the articulation teacher's "hand is against every man and every man's hand is against his." The time that the oral and aural children are gone, seems to me to be nearly as good as lost to the rest of the class. The only remedy, then, is either to teach them in separate schools or in separate departments of the same school. The latter is the method adopted at the Nebraska Institution, and, while it has its objections, is possibly, upon the whole, better adapted to meet the needs of the different classes of pupils than any other. One of the first objections will probably be the increased expense. It will cost more because it will take more teachers to run a school in two departments than in one, for the extra pupils of the speaking classes could probably be stowed in the sign classes without materially increasing the number of teachers or overcrowding the classes. Yet we think the results more than compensate for the increased cost.

In a small school, a more serious difficulty is found in the classification of the speaking department itself. The number of speaking children is, in most institutions, less than the number of sign pupils. Consequently a less number of teachers must do all their work. In our own Institution, the past year, about 30 per cent of the pupils were, in our department, presided over by two teachers, while 70 per cent were presided over by five teachers. Very nearly equal, you say? Yes, but in the 30 per cent were pupils of all the grades taught by the other five teachers, so that the two teachers had about the same grades of work to do as the whole five teachers, though with fewer pupils, and besides, must give their special articulation and hearing drill. But, with all its difficulties, we think it accomplishes better results. Now what are some of the results? We think they are:—

I. All the pupils have done, at least, as much and as good lesson work as they would have done in sign classes.

II. The semi-mutes and other mutes have received more drill in speech and speech-reading than they could have done otherwise.

III. These semi-deaf children have received more hearing drill than they could possibly otherwise have done. They have heard more speech and reproduced more speech, and are, therefore, better able to hear than had they been taught in sign classes.

IV. All the mutes, thus taught, have more practice in speech, in hearing or in reading the speech of others, and are, therefore, better able to mingle in the society of speaking people.

I am aware that some may regard this last statement as the jejune fruit of the chestnut tree, but yet I believe it susceptible of proof, that by just so much as the child has gained in hearing, speech, or speech reading, by just so much has he the advantage of the sign-taught pupil in going out into the world to wrestle for himself. As a means of communication, the sign-taught pupil has his signs, spelling and writing. But neither signs, nor spelling, help him communicate with the hearing world. They understand neither the one nor the other. So the only means he has of communication is the omnipresent tablet and pencil. But the speech-taught pupil has, as a means of communication, spelling, writing and speech. His spelling will serve all the purposes of communication with his deaf friends. Both pupils have writing, and in that are, therefore, equal. But the articulation pupil has also speech. Maybe his articulation is faulty, his voice harsh and nasal. It may be "disagreeable to cultured ears," but it is just that much more than his sign-taught brother has. And other people, besides articulation pupils, have disagreeable voices—we have all heard even public speakers with as disagreeable voices as were ever found in a school room for the deaf. And no one ever suggested that they should discontinue speech. By as much, then, as the separate department gives to the pupil greater drill in speech, it is, by just so much, better and, by just so much, it ameliorates his condition.

But several have asked me, especially, in regard to the hearing pupils, if they get enough increased perception of sound to be of much benefit. We think so. In the advanced grades, under the personal instruction of the writer, are five semi-deaf and six speech-readers. All the semi-deaf were congenital, and only one, on entering school, could speak a word, or recognize a word by sound. All these in both classes, with two exceptions, one in each, get along at home and among their friends entirely by speech. The semi-deaf began their instruction, either in our own or some other institution, in the sign classes. One was dropped from the articulation class in another institution, because it did not pay to bother with him. It was never there discovered that he had any hearing. Although he has'been with us not more than four full terms, he is able to converse with any one using scarcely more than ordinary tone of voice, if within the radius of an ordinary room. His speech is almost perfect, and on meeting a new word, he is able to pronounce it about as well as a pupil of normal hearing of the same educational progress. Yet, when he entered, he could not recognize a single word through his ear, and could speak but very few.

Another member of the class is the boy, whom Dr. Gallaudet will remember as the one who stood nearest the teacher, because having the least hearing. Since the doctor's visit, he has been absent from school two whole terms and large parts of the others. Last year, he entered in the middle of November and left the first of April. Even with all the disadvantages of this continual interruption of his work and the consequent loss, he is able to carry on a conversation in an ordinary tone of voice through his hearing. His speech, though not

perfect, is intelligible, and no one, either at home or at school, ever thinks of doing anything but speak to him.

We had a new case enter last year. He is a young man of about seventeen years. He has more hearing than either of the other boys, or than any other member of the class had on entrance. Yet he did not have enough to receive his education in the public schools. His father had tried to teach him. He had tried the public schools, but gained little or nothing. His father had consulted some of the best aurists of this country, and finally took him to Germany for the same purpose, but all to no avail. When he entered in the fall, he could speak single words. He could write, and could copy anything that was written, but could not, either in speech or writing, make a sentence of his own. He seemed to take in only the most important words of a sentence. For instance, the sentence, "The book is on the table," resolved itself into, "Book—table." At the end of the year, he was doing the work of the fourth-year class, and was able to say almost anything he desired ; so much so, that he often talks to the other boys—the two mentioned above and one or two others, without the aid of his fingers.

These are some of the things that *we know* have been done.

THE PRESIDENT : There is now a short time remaining for discussion.

DR. PEET : I would like to say a few words in regard to the methods employed in teaching articulation in this Institution, and as they involve a different practice from that which has just been given, it may be interesting for you to look upon the question in the light of our experience.

As you know, I am a great believer in the efficacy of the language of signs. I believe it would be a good thing, if signs were taught in schools for the hearing. I believe that every teacher of the deaf and dumb, who understands the language of signs, makes growth intellectually. I believe that the ability to use signs is a great aid to every man in obtaining clearness of thought, and in testing himself therein. What he says in signs he understands. What he cannot say in signs, if he be a good sign-maker, he does not understand. And this, whether he can hear or is deaf. So that the sign-language goes hand in hand with every method of developing the mind, whether of the hearing person, or of the deaf and dumb, whether of acquiring language, or not ; and I believe its value is as great in the instruction of our pupils in articulation.

We do not make selections for our articulation work, but teach every pupil, one hour a day being devoted to each class. This work is entrusted to the regular teacher of the class if a hearing person, but if deaf, to a special teacher of articulation. All the pupils in the class are at first practiced in the pronunciation of the vowels and consonants. After this, they go through a regular phonetic system founded on the vowel sounds. One vowel being selected for a lesson, it is made to follow all the consonants and double consonants in such wise as to produce words. When given to them by speech, the pupils write the words in two columns, the first in phonetic, and the second

in orthographic spelling—for instance, pē = pea, bē = bee, dēp = deep, nē = knee.

The meaning of the words is then given in signs. Sentences are dictated with the manual alphabet, and a responsive sign for each word spelled is given by the pupil. Then the sentence is repeated in speech, and the pupils follow each phonic letter with the manual alphabet. In this way, they learn the principle that all speech is nothing but phonetic spelling, which has its exact counterpart in the manual alphabet. The teacher then teaches the proper pronunciation of the word. All the vowel sounds are thus taken up one after the other, and this exercise goes on day after day, week after week, and year after year, until the pupils become such good lip-readers, and are able to speak with such clearness and precision, that we see no reason to believe that we shall not be able to do just as good work as any articulation school in the country, and at the same time, have all the advantages of the other methods that characterize the Combined System.

MR. H. C. HAMMOND, of Illinois: I would say in reference to the beginning of the instruction in oral and aural work in the Nebraska Institution, that I had the pleasure of being present, when a class had been started but a few days, a class that was to be developed in hearing. Mr. Gillespie, who, you know, was the originator of the scheme, did not claim at that time that he could give hearing to pupils that did not have it, at least he did not claim it in his conversation with me; but he did claim that there were a large number of pupils in other institutions, and quite a number in his own, that had some slight degree of hearing, that could be trained to recognize a certain number of words. He thought the reason they did not hear, was that they were not accustomed to hearing certain things; he thought they could hear some things more readily than others, and if they were trained to hear certain words, that finally they would come to recognize those words, and that the effort would be the same in the long run, as if they had hearing given them. So several pupils were collected, and when I first saw them they were obliged to stand very near to the teacher, and the teacher was obliged to use his voice to a great extent, put a great deal of force into his words in order to make his pupils hear. In order to test it fairly, of course, the teacher must be behind the pupil; otherwise the pupil will try to read the lips; so that the teacher stood behind John (I think the boy's name was John) and called out in a loud tone of voice, "John." Well, John heard something, and I guess he did not know at first what it was; but he said it again and again, and then wrote it, and John got hold of it; so he could write "John," when quite near the teacher. Then he stood a little further off, until, finally, he could recognize it at quite a distance from the teacher. After a little while, she used another word. The telephone had lately been introduced, and "hello" was quite a word; and so she used that word, with the same tone of voice that she used "John" in the first place.

Then I had the pleasure of visiting the class again, after they had been some months under instruction; and I found that these same pupils could recognize, clear across the room, about forty or fifty words, when pronounced in not so loud a tone of voice as at first, but in a

tone of voice (allowing for the size of the room) similar to what I am using at present. The idea that Mr. Gillespie tried to impress upon me at that time was, that if he should have sufficient time he could graduate them from the institution as merely hard-of-hearing pupils, so they could enter the public schools, and, with teachers that would be particular with them, could be educated with other pupils. I have since learned that he has not been able to accomplish that purpose, and I suppose the reason is that it could not be followed continuously enough, that the parents would take the children out of school and keep them at home. But there certainly was considerable improvement in that time; and it seemed, therefore, that in the future there might be a great deal more accomplished, provided it could be continued long enough.

DR PEET: I would like to ask Mr. Hammond, if he does not think that in a class of lip-reading pupils, if the teacher speaks loudly, he will very soon discover which of them has some degree of hearing, and whether, by treating them in the same class with others, he can not test the hearing as well as if taken separately.

MR. HAMMOND: I should think that might be so.

DR. PEET: We use Prof. Currier's Duplex Ear Tube, which consists of two tubes united in one ear-piece. The pupil is thus able to hear his own voice as well as the voice of his teacher. The picture which I hold in my hand, will indicate the manner of using it.



With the *toto-congenital* deaf-mute, articulation and lip-reading are not always convertible terms—that is to say, it oftens happens that

deaf-mutes may be taught to speak who attain little skill in speech-reading, while others learn lip-reading with comparative ease, but attain little power of articulation.

The acquisition of both is greatly facilitated by the possession of some degree of hearing.

This is especially noticeable in lip-reading, which, in persons not entirely deaf, often becomes so perfect as to lead to the supposition that there is no defect in their hearing. Prof. Currier's ear tube has three objects in view, in the case of those who are too deaf to hear the ordinary voice, and who have, consequently, not learned speech through the ear, *viz.*—

1. To impart a clear utterance by enabling the pupils to perceive and imitate sounds.

2. To educate the ear to such an extent as to enable the pupil to distinguish words spoken through it.

3. By means of this to acquire more easily the power of lip-reading to which allusion has been made.

MR. TAYLOR : I would like to state that, if any one understood that we could develop hearing where there was no hearing, they are mistaken, because I don't think that any body could do that. If there is a little hearing, we may develop it, but we cannot otherwise, where there is nothing. Whether the faculty increases in strength or not, I do not know, I only know that, whereas before instruction they could not understand anything, now they do. Before that, they were unable to recognize spoken words. Whether it is the increased strength of the hearing, or, simply the listening habit increased, I am unable to say, and I don't know as I care, the result is the same in either case, and the only thing necessary is the practice. If Dr. Peet has more practice in hearing than our school, it is that much better. The system that has the most drill, is the best system.

DR. PEET : I thought that one difference between these systems was that we taught all our pupils lip-reading and articulation, and incidentally developed their hearing—educated their hearing—and that you recommend selections. That is the difference in the practice.

MR. F. D. CLARKE, of Arkansas : I spoke in California at considerable length on that subject, and I have seen no reason since then to change any of the views that I there expressed. There is one single point on which, I think, we differ from our friends from Nebraska, their plan being to teach the pupil to understand spoken language through the ear, and we care very little whether that spoken language is understood through the sense of hearing or through the sense of sight. If we could bring in any other sense that would assist, we would be perfectly willing to call on that. We do not train our pupils by standing behind them. It happens that those sounds that are recognized most readily by the eye are the sounds that are hardest, as a rule, to recognize by the ear ; and if the pupil has a little hearing, it will help him very much in those difficult, obscure to the eye, vowel sounds, with which all our articulation teachers have so much trouble. We teach our pupils exactly as if they were totally deaf, but we speak in a loud voice, so that if there is any hearing, it will be helped to that extent.

I do not intend to take any more time, but if there is a little time, I shall be very glad to hear a wider view from Prof. E. H. Currier, as I am sure the convention has heard but very little from him on this subject.

MR. E. H. CURRIER, of New York : In view of the great amount of matter that *must* be presented to the convention, I feel very reluctant to take up a single moment of the time. This much I will say, however, that the views set forth in the paper that I presented at the California Convention have been fully confirmed by my experience of added years. I can, therefore, do no better than to refer the members of this convention to that paper, and also to the report of Prof. Dupont, of the National Institution for Deaf-Mutes, Paris, under date of April 2d, 1889, a notice of which, by Prof. Gordon, of Washington, D. C., appeared in the April number of the *Annals* of the current year.

There is a wide field open to us in this matter of aural instruction—development if you please—but I fear that many are deterred from working therein, from the fact that, to the general public, it is a much more wonderful thing to appear to secure speech and lip-reading without acknowledging the existence of hearing than to effect the same results by means of its aid.

THE PRESIDENT : This interesting discussion will have to be deferred in obedience to the exigencies of time and of the programme, and we will pass to the reading of the next paper, "How to Conduct Examinations," by Prof. A. S. Clarke, of Hartford, Conn.

HOW TO CONDUCT EXAMINATIONS.

By Abel S. Clark, of the American Asylum.

The period of examination is the crucial time which every teacher more or less dreads.

Let him have worked never so faithfully, intelligently and perseveringly, he is likely to feel that for once he is in the power of his pupils ; for what will remain as the ocular result of weeks and months of toil is an entirely unknown quantity. If he has not learned to take things philosophically, meagre or unsatisfactory results will be likely to cloud the closing days of the school year, and forcibly suggest to him that he has probably mistaken his calling. That he is unwisely expecting perfect results under conditions which make perfection impossible, he is apt to overlook ; but when he compares notes with his co-laborers, he finds few if any of them perfectly happy. Some best pupil has made such an egregious blunder as he never made before, and some dull one has managed, in passing the simplest and plainest facts through his brain, to make them a ridiculous jumble.

Out of the examinations of his various classes, during more than a score of years, the writer is constrained to confess that he has seldom emerged with a particle of complaisance and generally in a state of mind bordering on despair.

Now the thing for the teacher to keep steadfastly in mind is, that however much an examination is likely to reveal, it is often far from

being an absolute test either of the fidelity and efficiency of the teacher, or of the real calibre and attainments of his pupils.

The causes that may contribute to failure are many—some of them trivial, some unexpected. It may befall a really efficient, hard-working teacher through a neglect to summarize and bring before the minds of his pupils, all subjects of study in a concise and orderly way.

Or, it may come inexplicably, as the results of a heavy dinner or a badly ventilated room, or through the examination being held in an unwonted place. Some persons associate facts with surrounding objects, and if an extempore preacher is accustomed to fix the consecutive heads of his discourse upon his fingers, or hang them upon the pillars of the sanctuary, surely it may be expected that some pupils, will connect facts in history, or science, or methods in arithmetic, with familiar objects in the schoolroom.

Or, the class may be the victims of unintentional error on the part of the person or persons by whom the examination is arranged.

In view of all these, and numerous other contingencies, it is sheer folly for a teacher to be unduly cast down by unsatisfactory results, or much elated by the reverse.

Examinations *must be* held. They are an inseparable adjunct of school work, and exert a most salutary influence over teacher and pupils alike. Great care, however, is needed to make an examination as perfect as may be, and, for the attainment of this result, *examiners, teachers and pupils* must unite.

In connection with our subject, various questions arise. Should two examinations or only one be held during the year? If two, should the final one include the whole year's work? How much allowance, if any, should be made for the unexpected disaster that may overtake any pupil? What value should be set upon the examination mark in determining the pupil's standing? By whom should the examination be arranged, and of whom should the examining committee consist?

Taking up these questions in this order, I would venture the opinion that *two* examinations, one in mid-year, the other at the year's end, are better than one only.

In general, upon young classes and classes of only moderate capacity, it is not wise to lay the burden of retaining the facts of a whole year's work in mind, especially if a *text* book is used. General results in language and arithmetic may fairly be expected to remain in the mind, but the task of retaining an appreciable amount of distinctive information concerning hundreds of historical characters is absolutely too great for many, who, under easier conditions, would make a respectable showing.

With regard to making allowance for unexpected failure, I would suggest that the utmost caution is necessary. Ordinarily the pupil's mark should be strictly adhered to, yet in the case of one about to graduate, whose feelings might be grievously wounded, the committee may certainly be somewhat lenient. I think that the common method of averaging pupils' marks given by the teacher during the year and the examination mark, is both sensible and just.

For the selection of topics and the arrangement of the whole examination, who is so suitable as the Principal?

Knowing the status of each class and the peculiar methods of each

teacher, conversant also with what each class has been doing, the principal is qualified, as no other person or persons can be, for the work.

The principal should also be, *ex officio*, at the head of the examining committee for every class, but the other members of the committee selected by him, should be the other teachers in turn.

Let us now turn to the examination itself, and consider some important particulars to be observed, if it is to be a fair and genuine test.

It is well that the topics selected for examination should be wholly unknown to teacher and pupils till the moment when the examination begins.

Again, there should be no help or explanation given by the teacher to any pupil, other than in relation to such expressions as he knows them to be unfamiliar with; nor should there be any communication between one pupil and another. When the exercise is over, and the papers have been gathered up, the pupil should on no account be allowed to make any changes or corrections in his paper. Again, every examination should be conducted as *quietly* as possible and kept free from disturbing elements. To this end, visitors should be excluded from more than a casual glance. A public exhibition before breaking-up is well enough, perhaps desirable, but flourish and display have no more legitimate place in an examination than they have in a battle, though they may have a place after the struggle is over. There is danger that, if outsiders are invited in, the true object of an examination will be lost sight of, and that resort will be had to *cramming* of set phrases and principles calculated to astonish everybody but the initiated. Moreover, the *wisest* man in other vocations has little qualification to discriminate as to the true value of *our* peculiar work.

Examinations should, in general, be *written*, for various reasons, the chief one being that the results may be preserved. The knowledge that they are to be kept for future reference, must have a salutary influence upon teacher and pupil alike, and the Institution will have a standard either to attain or to surpass. But there is nothing like signs to show how much a pupil really knows of History, Physiology, Physical Geography, and kindred studies, for, after all, we find that the attempts of congenital mutes to write at length on such topics are necessarily a reproduction, often most unsatisfactory, of the language of the text book or of the teacher's manuscript.

Of course, an examination in articulation must be on a different basis, and should be kept entirely separate from that in other branches. It may be divided into three parts, *viz.*, distinctness, accuracy and fluency of utterance; quality of voice; and facility in speech-reading.

Great care should be taken to make an examination representative of the quality and amount of work done by the class. Thus insignificant facts, or those only incidentally touched, should not be selected to aggravate the teacher and discourage the class.

The examination should be made as broad as possible, covering not a mere fraction of the work done, but really representative of the ground gone over.

I once knew a teacher on the verge of despair, because the questions in physical geography given to his class at examination had very little relation to the real subject matter, on which a year's work had been spent, having been left behind in the study of geography the year before.

Again, unless a school is so fortunate as to be amenable to an ideal classification, according to mental capacity and attainments, not according to school age, reference should be had to the very moderately gifted members of a class. A test, which the brighter ones can meet, may discourage and make ridiculous the plodding but equally faithful ones.

Due credit should also be given for carefully and neatly written work, that the poorer scholars may have a partial opportunity to retrieve themselves, and the fact should be emphasized that, after all, an examination may not be a true criterion of merit, but that faithful study, practical common sense, and upright conduct in one of slender mental ability, may forever balance all brilliancy of mind. I have thus, at length, and at the risk of being tedious, tried to notice many of the details which conduce to the failure or success of an examination, in the hope that consideration of this theme may not be without profit.

DR. PEET : I suppose that there can hardly be any discussion, where we are all of one mind and that one well expressed.

THE PRESIDENT : I will ask Mr. Mathison to take the chair for a moment.

DR. WILKINSON : I am not sure whether we are of one mind on this subject. I presume that all those who do believe in examinations, as laid out by Mr. Clark, would be of one mind, but the question comes up in regard to this matter of holding examinations at all. I am not prepared to announce that examinations are useless, but I am very strongly tending to the opinion that the examinations, as we have them, are of no use whatever ; I mean these yearly or half-yearly examinations. In the first place, as it has been suggested, they don't tell anything. They don't tell the condition of the pupils' mind. They don't get at the facts of the case. He is often rattled and fails to do himself justice. It is an occasion of great anxiety and worry to the pupils, especially to girls.

I have had again and again, pupils break down just before the examination towards the end of the year through nothing in the world but anxiety about the examination. There is a tendency to neglect their studies as they go along, they know that the examination is coming at such a time, and they, especially those that are quick and bright, can acquire easily and forget easily.

They will put it off until the last minute to prepare for examination, and then they will study night and day and cram up, and perhaps pass a very creditable examination. But it does not exhibit or indicate a mental discipline that is of any particular value to them. This breaking down is to me a very serious matter, and the consequences, in some cases, were so serious that I began to cast about to see if I could not devise something better.

Now, it has been our custom for the last two years to have no yearly examination, but to have an examination every month. Our examination comes the last day of the month or the last two days, it often extends over two days, and is an examination of what our pupils have been over. I allow each teacher to prepare his questions. If I have a teacher that is not honest enough to be honest in an examination, he has no place in the Institution with which I am connected, but I think

they are all honest. There is no reason why they should not be, and they prepare their questions themselves, and the papers are generally submitted to me. I make it a point to go over the papers. I do not mean to say that I read carefully every one, but I look them over, so that I know about what they are and the condition of the pupils' minds. It is not entirely lost as a corrective exercise, because these same papers afterwards are corrected, and they are marked in red ink, so that it is very clear where the mistakes are ; and then, after the examination is done, the papers are given back to the pupils and they can have the benefit of the corrections.

A year ago, I called a meeting of the teachers before the last examination at the close of the year, and asked them what their opinion was in regard to it, and the opinion was unanimous that it had worked more successfully than any other form of examination. There is a stimulus from week to week for the pupil to do his best. He does not feel that he can cram up on it, and I do not find any disposition to do it, and it does not break down pupils, which I think is of the highest importance.

I only throw it out as a suggestion. I am not prepared as yet to recommend it to any one else. I only give our experience so far as being favorable to it, and I know the yearly examination does not do the pupils justice.

MR. R. B. LLOYD, of New Jersey : I think that examinations are useless, except as a stimulus to study. It is well, however, to let the pupil think that something depends upon his learning his lessons well. The teacher knows what the boy can do better than the boy knows himself, and the classification had better be made after consultation with the teacher and principal, regardless of the showing the pupil has made.

DR. WILKINSON : I wish to add one word to what has been said. The yearly standing is made up from the average percentage of monthly examinations. They are all added up, and the average taken, and that is the year's mark, which is sent home.

DR. WILLIAMS, of Hartford : I think the great value of examinations consists in the stimulus that is given to pupils through the whole year. If there is before them a fair examination, they know they have got to prepare for it, and go through it.

Now, as to this point of the pupils breaking down, that happens occasionally, and it is a misfortune. But we consider the good of the whole school, and if the teacher keeps the marks of his class through the year, and at the end of the year holds an examination, the two together will give a fair average of the pupil's work for the year. It should be a fair test of the pupil's comprehension of what has been taught him in the class, with no chance for any special cramming. And then, as to the excitement of the pupil, I think if a little caution is used in making the pupils understand that we do not expect perfection of them ; that if they, on a scale of ten, on an impartial examination, get a mark of seven, it is not a bad mark ; eight is a good mark ; nine is a very good mark ; and ten excellent—so excellent that a child can seldom expect to get ten—there will be little danger from over-excitement.

We make out examinations in such a way as to put the pupils to a severe test. We do not intend to make it too severe, but we give them to understand that if there are some things that they happen to slip on, it isn't any life and death matter. Then we compare the average of the examination marks with the average of the teacher's daily marks, and in this way we do not get very far out of the way; and I have been surprised in going through the school, to see how few marks would differ essentially in the examination from the marks of the year. But if in any case there should be very wide discrepancy between the two, it should be inquired into with a view to seeing if any injustice has been done. If through embarrassment or excitement, a pupil should fall far below his average daily standing, that fact should be given due weight, and while the mark should stand, the pupil should not lose his classification or his grade.

MR. HAMMOND : I would state that in institutions where having one examination or two examinations in a year is the rule, a good deal of benefit is derived from the habit of examination on the part of the Superintendent. Occasionally, what one might call a "snap" examination is beneficial : that for this examination no warning should be given to classes ; and if you care to carry it so far, no warning should be given to teachers, but certainly so far as the pupils are concerned, no warning should be given.

MR. DOBYNS, of Mississippi : I think teachers do their pupils harm in grading them too high. We require our teachers to keep a weekly grade of each pupil, and at the end of the week, I look over the grades to see how each pupil stands. I examine each class in each study, occasionally, and, after I have examined a class, if I find a certain pupil's work has not been as satisfactory as it ought to have been according to the grade, I suggest to the teacher that probably he or she is graded too high. If any one has made a more satisfactory examination than his grade would justify, that he was not graded high enough.

THE PRESIDENT : We must pass on to the next paper, "Manuscript Lessons," by Prof. F. W. Booth, of Philadelphia.

MR. F. W. BOOTH : Fearing the title of my paper is not sufficiently suggestive, and that it may possibly mislead, I may better, perhaps, preface what I have to present, by saying that it is not purposed to show special virtue in the mere writing, the manuscript form, of lessons. That is incidental. The issue is between lessons prepared by the teacher of a class for his class, and book lessons, or lessons prepared by some person other than the teacher.

MANUSCRIPT LESSONS.

By F. W. Booth, of the Pennsylvania Institution.

It is the purpose of instruction to add knowledge, and to develop and strengthen the powers of the mind. Aids to instruction are employed, and methods are devised, all with this purpose in view.

One of the most common, and perhaps, the most useful of aids em-

ployed in teaching, is the lesson. It is the tangible connection between the teacher and his pupils: the thing which he teaches; the thing which they study and learn. It has innumerable forms, and it passes under many disguises, but its purpose is always the same, and it may, in any of its forms, be recognized by its purpose.

The work of teaching the deaf is peculiar, and has peculiar requirements. The demands that it makes upon the art and ingenuity and industry of the teacher, are far greater than are made in any other class of teaching. Knowledge flows in one stream, and the teacher is its source. It flows as he directs, and in kind and measure as he chooses. He studies and devises and teaches, and his pupils learn.

The one great lesson that is constantly before the pupils, is the teacher himself. They study him, and learn him, and know him. His individuality and character are stamped upon, and associated with all that he does, and his acts and expressions, and even his thoughts, are read and interpreted through knowledge of him. The great lessons of life, and the minor lessons as well, coming thus through this medium, are studied and understood in just the color and character that the medium gives them. The teacher's faith is their faith, his feelings their feelings, his judgment, interest, ambition, theirs. The mother has scarcely more influence over her child than the teacher over his pupil. It is little wonder, then, that pupils grow up and develop upon the pattern of their teacher. The greatest Teacher who ever lived, was himself the lesson that the world has studied with the greatest profit; and it is only in His life and character that may be found the true interpretation of the lessons that He taught.

Thus does the teacher infuse himself into his teaching: it is his personality that gives it life, his assurance that gives it value, his stamp that gives it currency. And so with the appliances that he employs: they are fitted to his hand and weighted to his strength; they are a part of him—the outgrowth of the intelligence that devises them and the complement of the power that uses them.

It is only by this identification of appliance and teacher and work, that unity of purpose and concentration of effort may be secured, and thereby a high degree of success attained. In the measure that this identification is complete, in that measure will results satisfy.

Of all the appliances that may be employed, the appliances devised by a teacher are the most useful to that teacher; their fitness is their adaptation to *his* conception of existing needs. The lesson, as an appliance used in the instruction of the deaf, may be brought in its development to a high degree of excellence more easily, perhaps, than any other appliance that is employed.

But what constitutes excellence in lessons, and how may their maximum of utility be at all times secured? Excellence, as a quality, is relative, and it inheres absolutely and permanently in nothing. The best, conditions changing, may become the worst. An excellent lesson is excellent for a certain class and in the hands of a certain teacher. It is excellent because the class can study it with profit, and because the teacher can teach it with good results. Its excellency, obviously, must depend upon its adaptability to the needs of the class, and upon its conformity to the purposes and methods of the teacher. No two classes have the same needs; no two teachers have the same methods.

it follows that no lesson may be taught to different classes, or by different teachers, with equally good results.

The best lesson, then, must be considered with reference to the class that studies it, and to the teacher who teaches it. The problem is presented : Given, the class ; given, the teacher ; the lesson to be determined. The needs of the class, general and special, and the purposes of the teacher, immediate and remote, are the conditions that must govern and determine in the solution.

The needs of the class must be considered with reference, first, to its capacity ; second, to the amount and character of the knowledge that the class already possesses. The lesson may not be too hard, nor should it be too easy. It should be gauged in degree of difficulty to the ability of the class to comprehend and master. The knowledge contained in the lesson should be in character such as will readily merge into and become a part of knowledge already in possession and in use, and in quantity only enough to satisfy interest and gratify desire ; the language employed, to be itself a lesson, may be only a little more difficult than the language that the pupils themselves use. It will be observed that every lesson given a deaf child for study, is a double lesson : both the thing contained and the thing containing are studied and learned. For him there is knowledge in the lesson, and also knowledge in the language in which the lesson is conveyed. The two lessons require the most careful adjustment and adaptation of each to the purposes of the other, to secure the mastery of both. The knowledge in its conception must help to the interpretation of the language, and the language in its use must help to conception of the knowledge. Language for the conveyance of new knowledge may not be too simple, for every new use of language gives to it new interpretation and new power.

The interest of his pupils and their desires, are perhaps the strongest allies that the teacher can enlist to aid him in their instruction. In the preparation of the ideal lesson, then, the aid of these allies will not be rejected. Children who hear, study language and learn it unconsciously, and their teachers, for the most part, teach it unconsciously. Nevertheless, the lessons taught and learned are in their character excellent, and, in this connection, full of suggestion. Speech is a lesson to the child, only as its subject matter interests him, and only as study and learning on his part bring satisfaction of desires. The child's interest in things and in phenomena is too great, and his desires for information too numerous and varied, to become exhausted before language as a study is mastered. He needs, in order to such mastery, certainly no lessons in the preparation of which his interest and his desires have not been considered.

With reference to the teacher who teaches it, the best lesson will be the lesson that most nearly conforms to the purposes that he has conceived, and the methods that he has devised. It will be best for him, and best for him because he can teach it best. The teacher's conception of the nature and scope of his work will determine, in large measure, his conception of his duties as a teacher. It will determine, too, the nature and fitness of the appliances that he uses.

Whatever be the conception that he has of the nature of his work and of its scope, he will be able to teach only within the limits of that

conception, for his act can not be greater than his thought. Likewise, the appliances that he uses will do his will only within the same limits.

Every teacher is both an architect and a builder. He makes his plan, and he executes it. He may be taught, but he must learn and know all that is taught him : he must, in a word, be educated in his work, so that he may think and originate for himself. An imitator is a machine ; a copyist is a drudge ; *a teacher is a creator*. As a creator, he is omnipotent. Within the limits of his conceptions and his plan, he can do all things. His plan is but the preconceived expression of his own intention, and the power to do. It contemplates, moreover, the use of certain appliances, which in turn are conceived as adequate to their purposes. Thus is there mutual adaptation of plan, power to do, and appliances. To insure that the appliances shall be completely adequate to the development of his plan, they must be themselves the teacher's handiwork. He alone knows himself and knows his purposes, and he alone can recognize perfect adaptation and command it. So the lesson, to be adequate to the teacher's purpose, must be itself the teacher's work. The teacher can write everything that he has the ability to teach. If he can not, he must have less command of language than he would give his pupils.

A lesson is not a lesson, by virtue merely of its being a product of composition containing knowledge. It is a lesson only in so far as it may be studied and learned. Memorizing is not learning, unless there goes with it understanding and an acquisition of real knowledge, together with an increase of mental power. The absorption of water by a sponge in no degree strengthens the texture of the sponge ; nor does the absorption of language forms by the memory, strengthen the mind itself in any perceptible degree. In the course of time, both the sponge and the memory lose their contents, and nothing is left but emptiness. The teacher will not be deceived by the ability of pupils to commit to memory, nor by their ability to fit answers to questions. Neither ability, in itself, is a test of true study and true learning.

Study is an aggressive act : it is the going out of intelligence in search of intelligence ; learning is the finding of intelligence thus sought. The wisest man can not study in any other way ; much less can a little child. To learn to study, is to master a difficult art. Certainly deaf children are required to master none more difficult.

To teach to study through the use of lessons is difficult, and it requires the most careful adjustment of the means to the end. The teacher alone is in position to have knowledge for such adjustment. He alone can study and know the conditions that must be met. Hence it is, that the teacher is the one person who can prepare lessons for study adapted to the purpose to teach his pupils to study.

The first lesson presented to a deaf child for study is a single word. If he seeks meaning in the word, he studies ; if he finds it, he learns. He may memorize the word without acquiring its meaning, and reproduce it. But he has not studied, nor has he, by the act, learned to study. And so with sentences and longer lessons : the teacher writes ; he directs intelligence to seek meaning ; he gives meaning. The pupil studies, and learns ; and by such study, he learns to study.

One result of the careful adaptation of language lessons to the needs and to the capacity of pupils, is to teach them the art of reading. A

child can learn to read only as he succeeds in reading. Easy success gives pleasure, and pleasure in the act is essential to mastery of the art. The subject matter for reading must be interesting, and it must, moreover, be dressed in language that is in the greater part familiar and easy of comprehension. The teacher of a class is the one person, again, whose knowledge of existing conditions fits him for the preparation of such reading lessons. He may by proper adaptation make all lessons for study, reading lessons as well.

The perfect adaptation of instruction at all times to the requirements of existing conditions, precludes the use of a lesson the second time. A new class has new needs, and new lessons must be employed to meet them. The greatest change, however, is in the teacher himself. He has grown, and with his growth have changed : his plan of work, his purposes, his methods, and, with the rest, must change his appliances, also. He knows more, and can teach better. His old lessons contained, when presented, all that he could then teach ; he now makes new lessons, and they, in their turn, contain all that he can now teach.

Making lessons makes the teacher. Activity and effort are essential conditions to growth and the increase of power. No teacher can make, adapt, and use lessons to their highest utility, without vigorous exercise of every faculty that enters into the composition of the teacher. The more a teacher makes of his work, the more he makes of himself. The true teacher is self-made, or never made.

The poor teacher cannot teach any lesson well, but, even he, can teach his own lesson best ; he can, moreover, improve by the exercise of the lesson-making faculties, perhaps in greater degree even, than can the good teacher.

There is nothing in the act of holding a book, or even in translating and explaining words and sentences, that tends to the development of the teacher. A book-holder will do the one ; a dictionary the other. If ready-made lessons could teach themselves, then would inexperienced teachers stand more nearly on a par with the experienced, and it would not be necessary for them to spoil a class or two before they learned to teach. Growth in independence of such lessons, is growth in skill in real teaching. Complete independence, is complete mastery of the teacher's art.

The books prepared by teachers of the deaf for use in schools for the deaf, are immeasurably better for their purpose than books prepared for use in schools for children who hear. There is in them approximation, at least, to adaptability to the needs of a class of deaf children, and conformity to the methods and purposes of their teachers. They may be used as reading books, to supplement regular lessons taught and learned. For such purpose, they are, in the hands of the skillful teacher, unquestionably of great value. They, moreover, serve well the office of guides to new teachers, affording suggestions of plan of work, subject matter, and order of presentation of difficulties, that are very helpful.

No teacher ever did himself harm, or his pupils harm, by making his own lessons. He uses all the brain and genius he has in making a lesson, and, again, uses all in teaching it, and no more of genius or of brain can he use with any les

Let *me* teach ; let *me* teach *my* class *everything*. I can no more give way to a text-book as the teacher of my class, than to any other stranger to my class and its needs, or to any other iconoclast to my purposes and my methods. I protest against the interruption, and the interference, and the destruction. *I want my class, all the time, and they want me all the time—and all of me, not half of me.* *My* lessons are but extension of *my* power, prolongation of the reach of *my* genius, the doubling of the effectiveness of *my* art. Shall I give them up ; shall I give them over into the hands of an automaton ? I can write as good lessons as any body on any subject that I pretend to teach ; if I can not, I will abdicate my proud position as creator of knowledge, creator of intelligence, creator of character, and give way to another competent to do the work.

Teach ! Oh, let us teach ! It is opportunity—one lifetime to live, half a lifetime to work ! Let us put *ourselves* into our work, our whole selves—body and soul—and into every part of our work ; and they who are ours, our own—God given—for us to care for and train, may, nay, will, in the years that come and go, rise up and call us blest.

THE PRESIDENT : "The Deaf Teacher," by Prof. J. T. Elwell, of Philadelphia, is the next in order.

MR. COCHRANE, of Michigan : As Mr. Elwell is not present, I move that we proceed with the next paper on the programme, if there is one.

THE PRESIDENT : This is the last subject upon our afternoon programme.

DR. G. O. FAY, of Hartford : Mr. Chairman, if there are no further literary exercises, and if we are ready to attend to matters of business, I will introduce a resolution. Am I in order ?

THE PRESIDENT : You are in order, if we proceed to Miscellaneous Business. There is nothing before the convention now.

DR. G. O. FAY : I have prepared and now offer a resolution providing for the membership of the committee recommended in the general report adopted yesterday, a committee designed in the report to consider and to report upon any desirable modifications in the policy of our conventions.

Resolved, That the committee contemplated in the resolution adopted by the Convention, looking to the consideration of any desirable modifications of its working policy, consist of five persons, as follows : F. D. Clarke, A. L. E. Crouter, D. Greenberger, S. T. Walker, C. W. Ely ; and that this committee be instructed to report at our next convention.

You notice that the names read have been selected from all parts of the country, that they are the names of principals only, and that no name of our Executive Committee is included. Our past history, in which we glory, and which we, in the main, wish to continue, has been largely the fruit of the deliberative wisdom of our Executive Committee. We have continued its members in their responsibility from time to time by re-election, and at this convention we have again expressed our confidence by a re-election for the period that will ensue between this and the next convention. The omission of their names means no disrespect to them as a committee or as individuals. Far from it, it provides for a special committee, composed of

gentlemen outside of our executive members, intentionally, gentlemen who have been known as active advocates of various modifications in our historical and working policy. They are invited and required to gather up and to consider any possible modifications in our working policy, to recommend such as they consider desirable and practicable, and to report to us, for our action, when we shall meet again three or four years hence.

THE PRESIDENT : The chair does not wish to offer any suggestion against the resolution ; but would only inquire whether such an important matter should not come up this evening.

DR. G. O. FAY : To secure more deliberate action, I move that we lay it upon the table until this evening.

DR. PEET : I would like to hear from the Secretary in this connection, if it is proper, the original report of the committee which was made.

[Secretary reads report of Committee. See pages 193, 194.]

DR. GILLETT : As I was not present at the meeting yesterday afternoon, I would inquire whether, upon motion of Prof. Swiler, the Executive Committee was not instructed. [Secretary informs him that such resolution was passed, and Dr. Gillett continues.] Now, if it is desirable to change that, we can re-consider the action of yesterday afternoon. I think the Secretary has stated that the resolution was passed. I have no objection to having it stand till the evening.

DR. G. O. FAY : The report adopted by us yesterday, as I recollect our proceedings, provided, in its first part, for the appointment of a committee, unspecified, to consider and to report upon the subject of "modifications." It did not commit the subject to the Executive Committee or to any other committee, existing or new, by any vote I remember. It provided for a committee not then named. That committee, the resolution offered by me is intended to nominate. I noticed in the discussion yesterday that some advocates of the general report, as a whole, assumed that its adoption would of itself commit the matter to the Executive Committee. But such was not the wording, nor the intention of the report, at all. The "modifications" committee, as I recollect our proceedings, is still unappointed. But whatever the facts may be, I do not wish to consume more time in assertion or debate, and hope that the motion to lay on the table will prevail.

THE PRESIDENT : The motion will lie upon the table.

DR. PEET : At the proper time, we should consider Mr. Tillinghast's motion to construct reading charts.

MR. HAMMOND : As I understand, near the close of the paper, he said, "I move that so and so be done."

THE SECRETARY : The exact wording of Mr. Tillinghast's motion is as follows :

"I accordingly move that this Convention appoint a committee from the ablest and most experienced of our profession, which committee shall have, as their especial business, the preparing of the reading charts suggested in my paper. ~~in connection with~~ having them pub-

lished. Pictures specially prepared to illustrate some of the charts and to aid in other school work should also be arranged for."

THE PRESIDENT : Will any one second the motion of Mr. Tillinghast?

DR. PEET : In seconding the motion, Mr. President, I would suggest that it be referred to the Executive Committee of the Convention, with power to call in the assistance of any one in the matter; and I wish it referred to them for this reason, that if they see fit to get up these charts, it would be easier than if it were referred to a special committee. I move, therefore, that it be referred to the Standing Executive Committee, with power to act.

THE PRESIDENT : You have heard the motion. All in favor will manifest it by raising the hand. Those opposed, the same sign. The motion is carried.

DR. PEET : I move that Mr. Elwell's paper be referred to the Committee on Publication, with power to print.

THE PRESIDENT : If there be no objection, it is so ordered.

[When the Committee on Publication called upon Mr. Elwell for a copy of his paper, he particularly requested that he might be permitted to withdraw the same.—**SECRETARY.**]

THE PRESIDENT : A motion to adjourn is in order.

MR. S. T. WALKER, of Kansas: I move that we now adjourn.

THE PRESIDENT : You have heard the motion. All in favor will raise the hand. All opposed, the same sign. The session is adjourned.

CLOSING SESSION.

WEDNESDAY EVENING, August 27.

The Convention was called to order by the President at 7:45, and the minutes, beginning with those of Monday afternoon and concluding with those of this afternoon's session, were read by the Secretary, and approved.

DR. G. O. FAY, of Hartford: Prof. Currier, the Secretary of the Convention, whose word I am willing most certainly to rely upon as a basis of action, has informed me that the business referred to in the resolution presented by me, just before the close of the afternoon session, was certainly covered in the proceedings of yesterday. When I offered the resolution this afternoon, I was not aware of that fact, and, as I do not wish to occupy further the valuable time of the convention in discussing the point at issue, I ask the consent of the convention to take my resolution from the table, and for leave to withdraw it.

THE PRESIDENT : If no objection be made, Dr. Fay's request to withdraw his motion is granted.

MR. A. L. E. CROUTER, of Philadelphia: I beg leave, Mr. President, to present the following report:

"Agreeably to the resolution passed by the convention at the regular session held yesterday afternoon, assenting to the organization of an oral section, the oral teachers, members of this body, held a meeting at one o'clock to-day, and organized for the transaction of business by electing D. Greenberger as Chairman, and E. S. Thompson as Secretary.

"After a full interchange of thought, it was, on motion, resolved to organize the section in oral work upon the model of the general convention. An executive committee, consisting of the following persons, was appointed to look after the general business of the section :

"Caroline A. Yale, Chairman; Ellen L. Barton, Sarah Fuller, D. Greenberger and A. L. E. Crouter.

"A resolution was unanimously adopted, thanking the convention for permission to organize the section as an integral part of the general association. Adjourned.

"Respectfully submitted,

"CAROLINE A. YALE, *Chairman.*"

MR. DOBYNS, of Mississippi : I move that the report be accepted and spread upon the minutes.

THE PRESIDENT : You have heard the motion : all in favor will signify it by raising the hand. All opposed, by the same sign. The motion is carried.

MR. Z. F. WESTERVELT, of Rochester : This afternoon there was perfected the organization of a society, which wishes to make the announcement to the convention of its organization as an active worker together with all other organizations that look to the good of the deaf.

This society is organized as an association for the purpose of promoting the teaching of speech in all schools for the deaf throughout America. A board of trustees has been elected, composed of Dr. A. Graham Bell, Miss Yale, Miss Barton, Mr. Greenberger, Miss True and Mr. Westervelt.

It is not a pure oral society ; its purpose is to include every one who desires to promote the teaching of speech to the deaf, and it hopes, on this ground, ultimately to take into its number all teachers of the deaf and all persons who can be interested in deaf-mute education. This association has been inaugurated, not because of opposition to articulation, or because its members have not had hearty sympathy and support from this convention, or because they wish to antagonize any of the educational interests represented here, but to enable its members, by organization, to work effectually in harmony with their associates in the profession.

Though every school in the country teaches articulation, or, if not every school, almost every one, there were, according to the *January Annals*, about five thousand of the deaf children in attendance at our schools who did not receive instruction in speech. It is the purpose of this association, in such ways as may be open to it, to aid the schools which these pupils attend, to give speech to these five thousand, or to as large a proportion of them as possible. It is not the purpose of the association to attempt to induce the schools of the country to become distinctively articulation schools, or in any way to

change their character, but as all have expressed the conviction that it is their duty to teach every child speech,* it is the aim of the association to provide the necessary facilities for the accomplishment of this purpose, so that every deaf child should have the opportunity to learn to speak, or, at least, to discover that it is inexpedient to make the effort.

This association is expecting to file articles of incorporation as soon as the necessary organization can be effected, and I am very happy to announce that upon the completed assumption of its legal responsibilities, it is promised a gift, from Dr. Bell, of twenty-five thousand dollars (\$25,000). [Applause.] The society hopes to be in working order within a few months. One of its propositions is to open a summer school for teachers, in which instruction shall be given in methods for teaching speech ; just where or how it is to be conducted has not been determined. All details of plans to forward the teaching of speech must be left in abeyance until after the organization of the society. It is hoped that this association will be able to do work that shall receive the hearty sympathy and support of every teacher of the deaf, without regard to the especial method of teaching he may follow.

DR. P. G. GILLETT, of Illinois : Mr. Chairman, I want a moment to express my extreme happiness, gratification and satisfaction at the action that has been taken this afternoon, and which has just been reported to us by Mr. Westervelt.

THE PRESIDENT : What disposition will the convention make of report ?

MR. J. E. RAY, of Colorado : I move that it be accepted.

MR. J. R. DOBYNS : I move that the motion be amended by adding, that thanks be extended to Dr. Bell, and that the vote be taken standing.

THE PRESIDENT : You have heard the motion as amended : All in favor will manifest it by rising. [Great enthusiasm and applause.] It is unanimously carried.

DR. E. M. GALLAUDET, of Washington : I am authorized and directed by the Standing Executive Committee to report that they have made an arrangement for a committee of five to prepare an order of proceedings for the next convention.

That may be thought by some to be premature, but the committee were of the opinion that it was best to name this committee and announce them at once ; and that steps should be taken from this time onward to secure an order of business, arrangement of business, opportunities of discussion, and all other necessary arrangements for the ordering of the next convention as may insure those who have the pleasure of attending, having an occasion that shall perhaps be for once in a lifetime. The Standing Committee was authorized to make up this committee, either from its own membership or from the outside, the inference was, as I take it, from both. They have appointed Dr. Noyes, of Minnesota, Chairman ; with Miss Yale, of Northampton ;

* See proceedings of the Eleventh Convention at the California Institution.

Mr. F. W. Booth, of Philadelphia ; Mr. P. J. Hasenstab, of Illinois ; and Mr. S. J. Johnson, of Alabama.

THE PRESIDENT : You have heard the report of the Executive Committee in regard to the arrangement for preparing the order of proceedings for the next convention. What disposition shall be made of this report?

DR. G. O. FAY : I move that the report be accepted and adopted.

THE PRESIDENT : You have heard the motion. All in favor, signify it by raising the hand. All opposed, the same sign. The motion is carried.

THE PRESIDENT : It is usual at this time and stage in the proceedings, to gather up the loose threads of the convention ; to hear and act upon the customary final resolutions ; and to make preparation for the close of a meeting which has been an occasion of great interest and profit to all of us. We are now under such order of business, and first of all will listen with bowed heads and sorrowing hearts to the report of the Committee on Necrology, the saddest duty of our quadrennial meetings.

MR. CROUTER : Mr. President, as Chairman of the Committee on Necrology, it becomes my duty to make the following report :

Brief accounts, Mr. President, of the lives and work of all those who have passed away since our last convention, have been or will be prepared. Many of these sketches have been handed in to the committee. If it is the pleasure of the convention to have them all read, it will be done ; but I would submit, sir, that time will not permit the reading of so many notices, and I have selected from the list the names of those who were very prominent in the work, and will call upon those who have prepared these sketches to read them at this time.

The first name is that of the Honorable Erastus Brooks, who was President of the Board of the Directors of the New York Institution, and temporary Chairman of our last Convention. The sketch was prepared by Dr. Isaac Lewis Peet, who will now read it.

HON. ERASTUS BROOKS.

The death, on the 25th of November, 1886, of Hon. Erastus Brooks, President of the Board of Directors of the New York Institution for the Instruction of the Deaf and Dumb, brought to a termination a long life devoted to the service of his country, his fellow-men, and his God. Left destitute by the death of his father, a man of honored memory, who obtained distinction in the war of 1812, he, at the early age of eight, was thrown upon his own resources for support, and thereafter became a striking illustration of what a youth of talent, courage, and energy can accomplish in this land of opportunity. From the counter he went to the printing office, and thence to the University, upon his graduation from which he became a newspaper correspondent and editor.

For forty years, he was editor of the *New York Express* and afterwards manager of the Associated Press, of which he had been the founder.

As a member of both Houses of the Legislature of the State of New York, and especially of the Constitutional Convention of 1867, and of the Constitution Commission of 1871, in which he proposed and carried important amendments to the organic law of the State, he proved himself a statesman of high order.

As a writer, he was clear, terse, logical, and easy, but disdained rhetorical flourish and ornamentation. As a debater he was convincing, and as an orator eloquent, the charm of his voice adding greatly to the effect of his words.

The many public addresses delivered by him on important and memorable occasions, were characterized by peculiar appropriateness and marked ability.

As a member of the State Board of Health, and of the Indian Commission, he contributed largely to the adoption of sanitary measures in city and country, and to the furtherance of a sense of justice and benevolent feeling toward the injured and neglected race with which this continent was originally peopled.

To those connected with the New York Institution for the Instruction of the Deaf and Dumb, he was best known as a member of its Board of Directors, during the twenty-six years of his connection with which, his benevolent face became familiar to several generations of pupils. The influence he was able to exert, both in his public and private capacity, to secure recognition and support to the work of educating the deaf, had an important bearing upon the success of the Institution, while the dignity and tact with which, from the year 1882, when he became President of the Board, he presided at the Annual Commencements and on those other occasions when the pupils were brought prominently before the public, lent an additional attraction to the demonstration of what had been done for those who had been elevated from a condition of mental and moral night to the full enjoyment of all that is brightest and best in intellectual and ethical attainment.

A man of kindest impulses and clearest scope of vision, logical in mental processes, and practical in suggestion, he, in every way, brought to teachers and pupils encouragement and assistance which will continue to benefit them for years to come.

During the summer of 1886, he accompanied the delegation from the Institution across the continent to Berkeley, in California, and participated in the deliberations of the Eleventh Quadrennial Convention of American Instructors of the Deaf. His opening address, as temporary chairman, and his remarks at different stages in the proceedings, added greatly to the interest of the occasion, and were of a character to give him a warm place in the hearts of all those in this country who are interested in the cause of ameliorating the condition of the deaf.

MR. CROUTER : Mr. J. P. Walker will read a sketch of the life of Mr. Joshua Foster, the former principal of the Institution for the Deaf in Philadelphia.

MR. W. A. CALDWELL, of Philadelphia : Mr. Walker requested me to read the paper for him, in case he was unable to return in time.

JOSHUA FOSTER.

Joshua Foster finished his life work at New Brunswick, New Jersey, on the twentieth day of November, 1888. He was at the time of his death in his seventy-fifth year, and forty-six of these years had been spent in laboring for the deaf.

Mr. Foster was a Pennsylvanian by birth, the place of his nativity, and the scene of his earlier years having been near Holmsburg, Philadelphia Co., almost within sight of the institution in which he so long and faithfully wrought. While yet a child, his parents removed to Penn Manor, where as a farmer's boy, and doing almost a man's daily work, he remained for two years. At the age of fourteen, he was apprenticed to a firm of Britannia-ware manufacturers in New York City, but ere he had remained there long, his literary tastes and deeply religious views led him to the determination of studying for the ministry.

He entered the University of New York in 1835, but in 1838, during a temporary closing of his Alma Mater, to add to his slender means, he accepted a position as teacher in the Pennsylvania Institution. This was in October, and such immediately became his love for the work he had entered upon, that he abandoned the intention with which he had begun his college career, and turned, with a devotion never exceeded by any one, to the education of the deaf.

Mr. Foster's career was that of both teacher and principal, but it was as teacher that he excelled. His use of gesture has seldom been equalled, never surpassed, his genius for imparting knowledge most marked, and he turned, in 1870, after thirty-two years of marvelous success in the schoolroom, to the duties of principal, with a feeling of ill-concealed regret. He accepted them, only because it was the unanimous desire of directors, teachers and pupils; but having accepted them, took to them all the zeal he had exhibited in his earlier work, and during the fourteen years of his incumbency performed every duty with rare tact, judgment and skill.

Mr. Foster was in person tall, erect, and well-proportioned, and in manner, suave and attractive to an unusual degree. In character, the same well-rounded model was preserved. Intellectually, both perceptive and reflective faculties were developed to a marked degree; benevolent, conscientious, firm, full of self-respect, possessed of great common sense, just and generous, he left upon all who met him an impression never effaced. He was cool and equable, possessed of great self-control, and never to the knowledge of even his most intimate friend embroiled in an unseemly quarrel.

Modest, honest, straightforward, honorable, high-minded, devoid of all duplicity, dissimulation, and meanness, he left a name without a stain, and an influence for good upon the deaf of his State that will endure and be felt forever.

MR. CROUTER : A paper upon the life and services of John Collins Covell, principal of the West Virginia Institution; prepared by Mr. A. D. Hayes, of that institution, will now be read by Mr. W. O. Connor, of Georgia.

JOHN COLLINS COVELL.

John Collins Covell was born in Newport, Rhode Island, December 19th, 1824. His father was an Episcopalian minister, and desired that his son should enter the ministry. He was graduated from Trinity College, Hartford, Conn., in 1844. One of his classmates was a son of Laurent Clerc, and he became interested in the education of the deaf. Soon after graduation, he accepted an appointment as a teacher in the Virginia Institution for the Deaf and Blind. He soon made himself thoroughly acquainted with this difficult work of educating the deaf. Later he was made vice-principal of the deaf-mute department, and on the breaking out of the late civil war, he assumed the principalship. He successfully conducted the affairs of this institution, in the face of all difficulties. He held this position until 1872. Two years later he was elected Principal of the West Virginia Institution for the Deaf and Blind at Romney, and managed it with great credit until his death, on the 4th of June, 1887. In speaking of his death, the correspondent of the *Wheeling, W. Va., Register* said: "The deceased was a man of extraordinary executive ability as far as conducting an institution is concerned, and he had complete control and management of the institution, which was kept in the finest condition. He had everything under his personal supervision, and having been a teacher of deaf-mutes all his life, and a highly-educated man, success followed, and under his supervision the institution grew."

MR. CROUTER: The next is a paper concerning one whom I am sure we all remember, Mr. George Wing, of Illinois, by Mr. A. G. Draper, of the National College.

GEORGE WING.

Since its last meeting, the body of instructors has lost an able member, and the ranks of the deaf an honor and an ornament, in the death of George Wing.

Mr. Wing was of New England birth, partially lost hearing in youth, and attended the Hartford school for some years. His calibre, however, was such that his attainments were largely the results of self-direction; as a consequence, perhaps, they were wide, and varied, and brilliant, rather than special or profound.

Upon leaving school, he was engaged in business until he entered the Minnesota School at its foundation. His life-work was mostly done in that school, although his death took place while he was connected with the Illinois Institution. The management of the Minnesota School can find no words too strong to express their appreciation of his character and services; while generations of its pupils bear the impress of his noble nature, his lively intelligence, and his patient labor.

The visible tokens of his work are few. He invented a system of symbols, still used in various schools; wrote an article on "Function Symbols;" and another, eloquently advocating the value of natural

human intercourse among the deaf while in school ; all of which can be found in the *Annals*.

Great as were his attainments and services, they were still surpassed by the nobility of his character. To him all littleness was foreign. No bitterness dwelt in his nature. He had something of the dignity of the immortal Lincoln, that was so broad and free it could not take offence. Keen and ready in repartee, he yet did never wound. With equal flow, the sparkle of wit came from his mind, and the milk of kindness from his heart. Perhaps the key to his career was his modesty. It was ineffable. His literary efforts, which to others seemed so excellent, to him seemed mean and poor. Like Mary Bashkirtseff, he was still forever nobly discontented with the best that he could do. This characteristic was, perhaps, a stumbling-block in his earthly career ; but surely it was the safest of passports, when he came to enter that realm where modesty is the pearl of all virtues.

MR. CROUTER : Prof. J. N. Tate, will now speak of Superintendent William D. Kerr, of Missouri.

MR. J. N. TATE : This sketch as now read is largely made up from the notice prepared by Mr. Henry Gross, of Missouri, for the "Silent World."

WILLIAM DABNEY KERR.

Died at his home in Fulton, Mo., on Friday, May 24, 1890, William Dabney Kerr, aged eighty-one years.

No more on earth will those kindly grey eyes, deeply set under bushy white eyebrows, look upon us. No more be seen that massive head, crowned with silver hair. That placid countenance, furrowed with age and care, told of years of noble striving, of energy expended, of love for God and man.

After fifty-eight years of unselfish devotion, the pioneer of deaf-mute education in Missouri was compelled to relinquish his work by increasing age and bodily weakness. His resignation as Superintendent was tendered in February, 1889, and very reluctantly accepted by the Board of Commissioners.

Dr. Kerr could trace his descent through the heroes of the Revolutionary War, far back to the Covenanters of Scotland. His father, the Rev. John Rice Kerr, was a Presbyterian minister of Charlottesville, Virginia. The son was born there March 4, 1808. During his childhood, the family moved to Danville, Ky., where his father was elected Superintendent of the Institution for the Deaf and Dumb, of that State. His education was mainly derived from his father, and he was just beginning a course in Centre College, when he was appointed a teacher in the Institution for the Deaf and Dumb.

He, however, continued to pursue his studies, while burdened with the full complement of a teacher's daily duties. This was in 1830, and three years later, his father, after holding the position of Superintendent for ten years, fell a victim to the cholera.

In 1837, he was married to Miss Susan M. Buckles, of Shepards-town, Va., who shared his lot for over fifty years, and who was

matron of the Missouri Institution for a very long period. Great things hinge on little ones. Mr. Kerr had finished his duties for the day, during the summer of 1850, when his eye chanced to rest upon a map of Missouri. His thoughts turned toward the forlorn condition of the deaf in that State, where no education was given them. Acting on the impulse, he wrote a letter to two of his friends, who lived in Fulton, and urged them to do something, to ameliorate the lot of the "children of silence." Through their efforts, and others interested, the State Assembly was induced to make some provisions for the education of the deaf. They appropriated \$80 per year for each pupil that should come to the school in Fulton.

Mr. Kerr was invited by the Board of Commissioners to come and take charge of the school. The invitation was thrice repeated, before he concluded to accept. In the eastern outskirts of Fulton—then a small village of 500 population—a small farm-house was secured, and Mr. Kerr began his labors with one pupil, a young Jew. As the school became better known, the number of pupils increased to twenty-seven before the end of the first year. The Civil War obliged the Board of Commissioners to temporarily close the Institution, and Mr. Kerr turned his attention to farming. He bought a farm north of Fulton, and took with him some of his pupils, whose education he continued at his home. In May, 1863, he was recalled, and re-opened the school with about thirty pupils.

Mr. Kerr was gifted with unusually good judgment in business, tempered with firmness and kindness. He possessed a rare insight into human nature, added to an intimate acquaintance with the peculiarities of the deaf.

Mr. Kerr was a staunch member of the Presbyterian Church, having been an elder in the church for over thirty years, and was sustained by an unflinching trust, "a sermon to be read and known of all men."

MR. CROUTER: Miss Yale has been kind enough to prepare a paper upon the life of Miss Alice E. Worcester, of the Clarke Institution, Northampton, which she will now read.

ALICE ELIZABETH WORCESTER.

Alice Elizabeth Worcester was born in Thetford, Vermont, June 5th, 1856. She inherited rare mental gifts, but with these, an exceedingly delicate physical and nervous organization. In the fall of 1875, she entered the Normal School in Salem, Mass. Later, she entered Prof. Alexander Graham Bell's School of Vocal Physiology, in Boston. Soon after her graduation from this school, she was, on the recommendation of Prof. Bell, offered the position of special teacher of articulation in the Clarke Institution, and at the opening of the school year, in the autumn of 1876, she entered upon her life-work in Northampton.

During the first few years of her work among the deaf, she gave her whole time and thought to the teaching of articulation, although she was never of those who seem to think that, once the power of articulate speech is given a deaf child, it is to be considered as having completed its education.

After some years of work in the schoolroom, she came to employ with great success a method of her own, by which she made "letters mark themselves for pronunciation by their position in words, and their connection with other letters."

Longer association with deaf children so impressed upon her their mental and moral needs, that she soon gave as much time and study to methods of teaching language, and of giving religious instruction, as she did to that department of the work for which she had received special training.

In October, 1886, she was appointed Associate-Principal of the Clarke Institution, though grave fears were at that time entertained that her always unstable health would be a serious hindrance to her assuming the full duties of the place.

Only a few months later—on the third of January following—she was "called home," and "was not, for God took her."

MR. CROUTER: Prof. D. R. Coleman will now kindly tell us of Samuel T. Greene, of the Ontario Institution.

MR. D. R. COLEMAN, of Belleville, Canada: Will you allow me a word before I proceed with the reading of this short sketch? The deceased and myself were co-workers in the Ontario Institution for twenty years, and during that time we had been close personal friends, and I, therefore, deem it a special privilege to say or read a word before this convention in memory of my deceased friend. It may not be out of place for me to relate the circumstances connected with the accident in which Mr. Green lost his life. On the afternoon of that fatal day, the 3d of February, Mr. Greene invited a few friends to go with him for a sail on his ice-boat after school was over. They proceeded to the bay, the wind being fair and brisk, and the ice being in splendid condition. They started, and were going at a rapid rate of speed. When they had proceeded about three miles, he discovered something that did not suit him about the rigging. So he proceeded forward, and adjusted the sheet or whatever was out of order, meanwhile giving the tiller into the hands of one of his friends. While he was performing this act of adjusting the rigging, he was standing on the cross-beam and hanging on to one of the stays. He turned around, and gave a sign to the steersman to come about on the star-board side, but the steersman misunderstood him, and instead of coming around to the right, he put his helm to the right, and Mr. Greene, expecting him to come around the other way, was thrown out and hurled for ten feet through the air, striking on his head at the base of the brain. His friends gathered him up, but he was unconscious. In a short while he rallied, and was able to walk home, over three-quarters of a mile, but had scarcely reached home when he became unconscious again, and died in fourteen days.

SAMUEL T. GREENE.

Samuel T. Greene, B.A., was born in Portland, Maine, in the year 1844, and died in Belleville, Ont., February 17th, 1890. He received his early education at the American Asylum, and afterwards entered the National Deaf-Mute College from which he graduated in the class

of 1870. At the opening of the Ontario Institution for the Deaf and Dumb, in October, 1870, Mr. Greene received and accepted an invitation to become a teacher in that Institution, which position he held till his tragic and untimely death. Mr. Greene was an accomplished sign-maker, a close reasoner, and a careful observer of men and methods. His positive character commanded the respect, and his genial disposition and courteous manners won the esteem of all. Mr. Greene always spoke gratefully of, and with affection for, the Institutions which nurtured him, and prepared him for those duties which he afterwards so faithfully discharged. He had a deep-rooted affection for the land of his birth, nevertheless, to remove every cause that might in the least degree impair his usefulness, he deemed it not inconsistent or unmanly to transfer his political allegiance to the country wherein he had chosen to make his future residence.

Mr. Greene was the originator of deaf-mute organization in Ontario, and to his wisdom, judgment and discretion, are the mutes of that province largely indebted for the association which held its second successful convention, in the city of Toronto, in June last. Mr. Greene's influence over the pupils of the Institution was unbounded, and was always exerted for their temporal and spiritual welfare.

His death has left a void in the hearts of thousands of Ontario's citizens—both hearing and deaf—that can never be filled, and the Institution has sustained a loss that will, with difficulty, be repaired. According to the wish, substantially expressed, of numerous friends throughout the province, a costly monument, appropriately inscribed, is to be placed over his last resting place. In recognition of his faithful services, the Ontario Government has granted his widow and children a gratuity of \$1666.

MR. CROUTER : Prof. Weston Jenkins has prepared a paper upon the life of the Rev. Henry W. Syle, of Philadelphia, which he will read to us.

REV. HENRY WINTER SYLE.

Died, in Philadelphia, January 6th, 1890, Rev. Henry Winter Syle, M.A., Rector of All Souls' Church for the Deaf.

Mr. Syle was born, November 9th, 1846, in Shanghai, China, where his father was stationed as a missionary. When in his fifth year, he was sent to America, on account of his health. At the age of six, he lost his hearing from scarlet fever. His education, which was carried on in the private school of Mr. D. E. Bartlett, at Trinity College, Hartford, Conn., and at St. John's College, Cambridge, England, was interrupted more than once, and by various causes; but whenever he studied, he won high distinction. He took his Bachelor's degree at Yale, in 1869, by the unusual and very trying course of presenting himself for a vigorous written examination in all the branches of the four years' curriculum, which he passed with the highest credit. For five years, he taught in the New York Institution for the Instruction of the Deaf and Dumb, pursuing meanwhile a course of professional study in the Columbia College School of Mines.

Leaving New York, he received an appointment as assayer in the

Philadelphia Mint, and, while holding this position, pursued a course of theological study, preparing himself for the ministry of the Protestant Episcopal Church, in which he was ordained priest in 1887. He resigned his position at the Mint, to devote himself to religious work among the deaf, and, as the nucleus of this work, he gathered a congregation which, under his ministrations, grew into an independent church. His field of labor expanded in many directions, until his time and strength, freely expended, were largely overdrawn, and an attack of the epidemic influenza found him with no vital force left to resist its attack.

Mr. Syle married, in 1872, Miss Margaret Flannery, who had been one of his pupils in the New York School, and who, with four young children, survives him.

The limits of this sketch will not admit any adequate estimate of Mr. Syle's intellect and character, nor any critical review of his labors. Such an outline of his life has appeared in the *Annals*, and appreciative sketches have been published in all American periodicals devoted to the interests of the deaf.

It is not too much to say, that in point of scholarship and literary culture he was easily first among the deaf persons of this country, and perhaps of the world. Every ambition common to noble minds he shared—the love of distinction, the consuming thirst for knowledge, the desire for association with his intellectual peers; but his crowning glory is this, that he unhesitatingly sacrificed every one of these, as well as all less exalted aims, whenever they conflicted with the ruling purpose of his life, which was, to serve the class with whom a common misfortune had allied him. And, as philanthropy underlay his studies, his social activities and his professional work, so a sincere but unostentatious piety inspired and pervaded his philanthropy. No more brilliant intellect, no more strenuous will, no purer soul has ever adorned our profession.

MR. CROUTER: Mr. Jerome T. Elwell, of Philadelphia, has prepared a paper upon the life of Thomas J. Trist, of Pennsylvania.

THOMAS JEFFERSON TRIST:

Among the many distinguished deaf teachers of our institutions, was the late Thomas Jefferson Trist, a descendant of Pocahontas, the historic Indian maiden, and then of Thomas Jefferson, the third President of the United States.

Though born with Nature's indelible seal on his ears, at Monticello, Va., the home of his distinguished namesake, it was his good fortune to have parents of brilliant and distinguished attainments.

In his father, Nicholas P. Trist, Minister Plenipotentiary to Mexico, he found a faithful "guide, philosopher and friend," who supplemented his youthful years through the thorny and uncertain paths to knowledge, by rare personal attention. He was a pupil of both the Pennsylvania and the New York Institutions for the Deaf, and our honored host, Dr. Isaac L. Peet, may justly claim him as having been one of his most distinguished pupils. Mr. Trist was naturally delicate

in health, but bright and appreciative of mind, and was sent abroad when quite a young man, for recuperation and travel.

On his return to the United States, he was appointed instructor in the Pennsylvania Institution for the Deaf, and continued in that position during a period of thirty-five years, till his death, which occurred, after a short illness, on the 26th of last April. As a teacher, Mr. Trist was judicious, faithful and enthusiastic in his calling. Though he usually had an intermediate class, he did excellent work as far as his material would permit, and I have often learned valuable lessons from his experience and methods.

As a man, he was sensitive, strictly honorable, careful of the feelings of others, brave and patient under afflictions, and generous to a fault. He was a person who looked at things with the eye of an artist, the judgment of a connoisseur, and the consideration of a gentleman rather than that of a critic. He was fully conversant in history, particularly in matters of the past and present generations, and in his younger days, he had an extensive acquaintance with authors of our best literature. He was one of those rare persons who always seemed to feel more concern for others than for himself. He felt a deep interest for the National Deaf-Mute College, and, while regretting the lack of a college training for himself, always hoped for the success and well-being of its graduates. He was diffident and modest of his own attainments, and always listened with respect to the opinions and claims of others less in years and experience. Naturally, he had a wide circle of sincere friends and few enemies, as many of you who are here will testify.

Mr. Trist was well proportioned and of medium height. He dressed in excellent taste, was graceful in manners, and had a sympathizing heart and helping hand for those below him. I am very happy to pay this tribute to his memory, and regret that I can not, in this hurried sketch, express in words, what I so deeply feel for a departed friend, whose friendship was, in itself, a rare pleasure to have.

MR. A. S. CLARK, of Hartford : Mr. President, I believe that with loyal and loving reminiscence of the dead we should combine consideration for the living. We are all very tired, and we have much other business yet to do. In view of this, I move that the reading of the other obituaries, which we should be glad to hear, be omitted, but that they be printed in the Proceedings of this Convention, and that we now proceed to the business yet remaining to be done.

MR. DOBYNS : Before that motion is put, I would like to take just two minutes to honor a name, and it is a name that is known to every deaf-mute in the United States and Canada, and read this short account, which I was requested to prepare and read to-night.

THE PRESIDENT : Will Mr. Clark withdraw his motion ?

MR. A. S. CLARK : I think it will be duly honored by publication in the report. I see no reason why this should be read and not the others.

THE PRESIDENT : You have heard the motion of Mr. A. S. Clark, that the further reading of obituaries be dispensed with, but that they be printed in the Proceedings of this Convention, and that we do now proceed to the business remaining to be done.

All who are in favor will please manifest it by raising the hand. All opposed, by the same sign. The motion is carried.

[The remaining obituary notices will be found at the close of the proceedings.]

DR. E. M. GALLAUDET: I have a matter which, I think, deserves to be brought to the attention of this convention. I promised a correspondent, who occupies a prominent position in a foreign city, to speak of a matter which concerns the life and work of one who has passed away during the year, and who has been known in many countries for the great work which he has done for the deaf. I need not take time to give any account of the life and labors of Mgr. De Hærne, of Belgium, for, doubtless, you have all read more than one publication of his eminent services, not only as an instructor of the deaf, as a promoter of the education of the deaf in many countries, but as one of the most prominent and eminent public men in Belgium, of the present century.

It was his good fortune to be one of the convention which founded the present system of government in Belgium fifty years ago, and he occupied a seat in the Parliament of Belgium for more than forty years, and up to the time of his death. The burgomaster of his native city sent me a letter a little while ago, informing me of the purpose of his fellow citizens to erect a statue, expressing a belief that there would be found those in America who would be pleased to have the opportunity to bear a part in the erection of the memorial. I wrote to the burgomaster expressing my readiness to promote this matter, and I have pleasure in saying that friends of Mgr. De Hærne have promised to start a subscription with fifty dollars, and I wish to say that I should be happy to receive any additions to this subscription. Those who knew De Hærne personally, as I did for many years, had for him boundless veneration and warmest affection. He was a man whom you all would have loved heartily, had you known him. He was a man who stood high among the world's best men, and no man whom I have ever known deserves more richly to have his personality preserved through marble or bronze.

I shall be very happy to receive any voluntary contributions that may be given to me here or later in correspondence.

THE PRESIDENT: Are there any further reports of the Committees? If there is no response, we will proceed to the order of Miscellaneous Business.

DR. ALEXANDER GRAHAM BELL, of Washington, D. C.: *Mr. President*:—We are now taking, perhaps, the most important census of the deaf that has yet been taken in this country, and, for the first time, the Special Agent of the Government, in charge of the Statistics of the Deaf, is an expert, familiar with the needs of the teachers of the deaf, familiar with the character of the statistics that would be of value to those interested in the education of the deaf. But, sir, the deaf constitute so small a proportion of the community, that I fear neglect upon the part of Congress and the officers of the Census. So that the statistics actually published may not be those most desired by members of the convention, unless the instructors of the deaf here assembled take

organized action. It is perfectly possible that, when results are published, Congress may cut down appropriations, so as to render it impossible for the Superintendent of the Census to print *in extenso* all the tables prepared. I would suggest that you request and empower your Executive Committee to confer with the Superintendent and Officers of the Census upon the nature of the details that shall be published. Organized action upon the part of this convention will, undoubtedly, lead to the retention of the most important tables desired.

I know that in the last census, very valuable material had been collected that was not used; and while that census was the best and fullest ever made, a great deal of detail was published that was of little value, compared to the material remaining unpublished. This is a very important subject, and if you want good statistics, you must see to it yourselves; you must get your Executive Committee to watch the matter. I do not doubt that statistics are now being prepared of great value, but we do not know what tables are going to be published and what are not. We want the committee to watch what is going on in the Census Office, and assist the Special Agent, Dr. Fay, and back him up with this organized voice of the profession, should any necessity arise, in retaining and publishing those details that may seem to him, and to your committee, to be of most value in solving the great questions in which we are all interested.

Now, there is another point: I have examined the censuses of the past, and have had access to the original materials from which the tabulated statements relating to the deaf were compiled; but I find that, in the earlier censuses, the special schedules relating to the deaf were destroyed, or sold for waste paper. The special schedules of the last census have been bound in volumes for preservation, but much other valuable material has been destroyed or lost—for example, alphabetical lists of the Idiotic and Insane, which would now be of value to the officers of the Eleventh Census, in the examination of the new statistics relating to these classes.

Now, the Census Bureau has collected an invaluable set of statistics, or rather data for statistics, relating to former and present pupils admitted to American Schools for the Deaf. The details have been written upon cards, so that the Census Office now possesses a card-catalogue of all the pupils of your Institutions, past as well as present. What is to become of this card-catalogue when the Census Bureau has no further need of it? If you do not make special efforts to have it preserved, the probabilities are that it will be sold for waste paper.

I think, sir, that this card-catalogue should come into the custody of this convention, as the representative of the schools for the deaf in the United States. It should be placed in the custody of your Executive Committee, and be rendered accessible to members of the profession and others interested in the deaf. I beg, therefore, to offer the following resolution:

“Resolved, That the Executive Committee be requested to confer with the Superintendent and officers of the United States Census concerning the tabulation of the returns of the census of the deaf recently taken, with a view of securing the fullest possible publication of such returns, and the placing in the safe-keeping of the Committee of

all material of value which would be likely to be destroyed on the completion of the census."

DR. E. M. GALLAUDET : The convention will remember that the Standing Executive Committee were charged with the duty of conferring with the census officers, and they will be very glad to be fortified by the vote of the convention in their endeavors to accomplish the work they are attempting to perform.

THE PRESIDENT : You have heard the resolution of Dr. Bell, relative to the securing, if possible, the fullest publication of the returns of the census of the deaf, and also to the keeping, by the Executive Committee, of all materials of value to the profession. All in favor of the adoption of this resolution, manifest it by the usual sign. Those opposed, by the same sign. The resolution is unanimously adopted.

DR. E. M. GALLAUDET : Yesterday a question was asked me with regard to the use of signs by students of the college, and I regarded it as an important question ; and I did not answer it myself, but suggested that some one of the college students should answer it. I would like to ask that a few minutes be given to Mr. Hanson, of the college, to answer that question, as to the comparative use of the language by signs or the finger alphabet by the students in the college, in their intercourse with each other.

MR. OLOF HANSON : Hearing people have sometimes asked me if I "graduated in signs" at the college. One can hardly help smiling at such questions, but I replied : No ; we do not, as a rule, use signs at the college.

This is the truth. In the recitation room the students use finger-spelling almost exclusively, and in the general conversation the majority prefer this mode of communication, though it must be admitted that a few, whose proficiency in language is not all that could be desired, use signs to a greater extent than is good for them.

We never use signs in designating one another, but always spell out the name, preceded by a Mr. To this day, I do not know the signs of half a dozen of my fellow students. We have signs only for the professors, but we spell out their names quite as often as we make the signs. Even for the domestics we have no signs. One of the dining room girls, who attended us all the years of my college course, has never been known to me by any other name than Annie. The pupils of the Kendall School, close by, have signs for many of the officers and servants, and sometimes use them in talking with the students, but this does not induce the latter to use them.

It is only in meetings, such as the chapel and literary society exercises, that signs are used and recognized as the proper mode of speech.

The same course prevails among students after leaving college, though those who constantly associate with the deaf may to some extent go back to signs.

Many of my hearing friends speak to me by spelling on the fingers. In the office where I have been engaged for the past two months, five of my fellow workers have already learned the American finger alphabet, while some of the others could use the ~~do~~ alphabet

beforehand. This they have done although I am not much of a talker, being rather inclined to keep company with myself.

During my recent travels in Europe, I met a great many deaf people in Italy and Germany, educated by the oral method, and some of them are excellent lip-readers. Yet I believe that a large majority of the deaf will always derive more enjoyment from a conversation with hearing people, if they can use the finger language, than if they can only communicate with them by means of lip-reading.

THE PRESIDENT : Five letters have been received, which the Secretary will now read. Unless there is objection made, these letters will be treated as the other communications from absent members of the profession have been.

[Secretary then read letters of regret from the Board of Directors, and from the Principal of the Victorian Institution for the Deaf and Dumb, Melbourne, Australia; from Richard Elliott, Margate, Kent, Eng.; from Amy Segerstedt, of Sweden; and from James Watson, of the Washington School for Defective Youth. These letters will be found on pages 22-28.]

THE PRESIDENT : Is there any further miscellaneous business?

[In response thereto, the following resolutions were unanimously adopted.]

By MR. C. H. HILL, of West Virginia :—

Resolved, That the thanks of the convention be tendered to its able President and his assistants for the intelligent, impartial, and satisfactory manner in which they have discharged their duties.

By MR. G. L. WEED, of Pennsylvania :—

Resolved, That the thanks of this Convention are hereby tendered to Mr. E. H. Carrier, Secretary of the Convention, and to his assistants, for the full and accurate record of our proceedings.

By MR. J. E. RAY, of Colorado :—

Resolved, That the thanks of this Convention are tendered to Dr. G. O. Fay, for the able and satisfactory manner in which, under the circumstances, he has conducted the work of the Normal Department.

By MR. J. DENISON, of Washington, amended by MR. J. E. RAY, of Colorado, to include "the ladies":—

Resolved, That the thanks of the Convention are extended to the gentlemen and ladies who have courteously interpreted the proceedings of the Convention, for the accuracy and completeness of their service.

By MR. F. D. CLARKE, of Arkansas :—

Resolved, That the thanks of this convention as an organized body; of each member as an individual; and of all the teachers and officers of our different schools, who will profit by work that has been done here; are most gratefully tendered to the Board of Directors of the New York Institution; to Dr. I. L. Peet, its Principal; to Mr. C. N. Brainerd, its Superintendent; to Mrs. S. L. Henry, its Matron; and to all its other teachers and officers, for the cordial courtesy and kindly hospitality, which have made our stay here one long pleasure, and for the cheerful energy and able management, which have made this large assembly a meeting of friends, and a most successful gathering of the teachers of the deaf.

MR. F. M. GORDON, of Georgia : I am exceedingly glad to hear that

resolution just read, giving thanks to that honorable gentleman, Dr. Peet, for entertaining us so well. I must say, that I have never met a convention where I have made so many acquaintances working to educate deaf-mutes. We have been entertained intelligently and instructively, listening to papers read upon different methods of instructing deaf-mutes. We feel that we have been greatly benefitted, and can go home with new zeal and greater courage to do more to help to instruct those that are deprived of hearing and speech. I hope, sir, that we will pray that God will spare that venerable gentleman, that he may live to see many more years and do more in teaching as he has done heretofore. I trust that the teachers who are engaged in instructing deaf-mutes, will live long to do more in their field of labor. We may not be spared by the Heavenly Father to meet in another assembly as this, to exchange views and discuss papers read on different methods of instruction. Some of us will be gone to our eternal homes. I conclude my remarks by repeating these lines :

"Like leaves on trees the race of man is found,
Now green in youth, now withering on the ground;
Another race the following Spring supplies,
They fall successive, and successive rise;
So generations in their course decay,
So flourish these, when those have passed away."

MR. R. MATHISON, of Belleville, Canada : I am desired to add my mite, or at least, to second the resolution which has been so ably presented by Prof. F. D. Clarke. We have been here under the care of the officials of this Institution for a number of days, and we can all say we have learned to appreciate their efforts in making us very comfortable indeed, in fact, so comfortably have we been housed and fed and looked after, that I shall regret to-morrow morning when I pack my trunk, and leave the place. We have the feeling that they desired to make us feel at home, and they have succeeded admirably. Everything has been done that could be done, and done in such a way that we felt as if we were among friends. Every visitor from Canada will go home with the kindest recollections of the treatment we received from officers, teachers, and all connected with this Institution.

MR. WESTON JENKINS, of New Jersey : The convention will perhaps bear with me a moment, in virtue of the fact that, as casually mentioned by my friend, the mover of this resolution, it is to the presence of the gentleman who has last spoken and of myself, with the delegations which we have the honor to head, that this convention owes the proper title of International. You remember the boast of the French minister, when the Queen had made some request of him, adding that she feared that it was difficult. His reply was, "Madame, if it is difficult, it shall be done ; if impossible, it is done already."

Well, it certainly was difficult, and I had apprehended that it would be impossible for any other Institution to come up to the standard of Californian hospitality ; but if it was impossible, it has been done, and we all bear witness to the fact.

DR. A. BELL, of Washington, D. C. : I would like to add my mite to the seconder of this resolution, and thank the officers of this institution for their cordial and very hospitable reception. I think they have made us all so comfortable that we do not want to go

home at all. I am sure that all who, like myself, are honorary members of the convention, join with me in adding my mite to seconding the resolution offered by Prof. F. D. Clarke.

DR. GILLETT: Before a vote is taken on this motion, I desire the privilege of saying a few words. To undertake to say anything in laudation of the hospitality we have received, sir, would be much like adding perfume to the rose, grandeur to Niagara, or sublimity to Mont Blanc.

Various honors come to us in our lives, and honors sometimes that we do not expect. One of the highest honors that I have ever had in my life, has been *three* times to have the privilege of entertaining a convention of the American Instructors of the Deaf and Dumb, in 1858, in 1882, and again in 1886, while it was *en route* to California; possibly I may have the privilege of doing something more in the same line at the meeting of this convention again. But I have had sufficient experience, Mr. Chairman, to know what is involved in the entertainment of such a body as this. While we have slept, these good persons, who have been named in this resolution, have been diligent in looking out for our comfort; while we have been enjoying ourselves socially and in business, they have been looking after our happiness and welfare.

Mr. Chairman, I have, during the exercises of this evening, had some very solemn and some very serious thoughts in mind; and have been reminded during the reading of the notices of our departed friends of an incident that I have read of, of one of Napoleon's generals, who, when dying, was asked by his great captain, what he could do for him. "Sire," answered the general, "You can call my name at roll call." We have been calling over the roll of comrades, who have gone hence. It is not every one who comes to the position of being oldest in his profession, as I stand here to-night the oldest superintendent living.

And now, Mr. Chairman, perchance this may be the last opportunity that I shall have of meeting with you, and when another convention assembles, another will respond as the oldest superintendent in the work. I trust, sir, that I may now, with unusual emphasis and feeling, second the resolution which has been proposed.

By MR. J. N. TATE, of Missouri :—

Resolved, That Dr. I. L. Peet, Prof. E. H. Currier, and Prof. T. F. Fox be appointed a Committee, to whom shall be intrusted the minutes and papers of this Convention for publication and distribution.

By WM. M. CHAMBERLAIN, of Rome, N. Y. :—

WHEREAS, The custom of appointing a Committee on Necrology at a Convention to report the deaths since the last one, is attended with much inconvenience and loss of valuable time; therefore,

Resolved, That a Committee on Necrology be appointed by this Convention, to report at the next Convention all deaths within its cognizance.

Resolved, That the present Necrological Committee be continued in office until the next meeting of the Convention.

THE PRESIDENT : Is there any further business before the Convention ?

The Chair hears no motion.

THE PRESIDENT, DR. WILKINSON : The hour has arrived, dear friends and fellow-workers, when we must address ourselves to departure ; some towards the North Star, some towards the Southern Cross, some towards the rising, many of us towards the setting sun.

The lines of life, converging from these varied quarters of the continent, have centered for a few days past in this beautiful home, situated amid these lovely surroundings, where we have enjoyed a hospitality as large and free as the lordly river which flows past its doors. But these pleasant days are over, and soon we are to take our way to our several spheres of duty, and resume those burdens of life and activity, which, for a brief time, have been laid aside, and which, in my own case, have been almost forgotten.

I can not express to you, in words, the deep emotion which has stirred my heart during the few days that we have been together. On this platform thirty-three years ago, I stood with trembling knees and delivered my first lecture to the deaf ; and here, after the life of a generation, I return and, by your gracious courtesy and kindness, preside over the largest convention of instructors of the deaf ever held in America. This Institution is hallowed ground to me. For many years it was my home. Every nook and tree upon its grounds has some tender memory. Its rooms and corridors are peopled with faces of the living and the dead, in whose dear companionship eight years of my life were passed. And first and foremost among them all rises the kingly form of him, who, for forty years, presided over the destinies of this Institution with such exceeding wisdom and success. I knew Dr. H. P. Peet well, and loved him much. Doubtless, he had his faults, but as Bolingbroke said of Marlborough, " Really, he was so great a man, I have forgotten what they were."

But I must not fall into the garrulity of personal recollections, or I shall consume both your time and your patience.

There are two moments of exquisite emotion in a gathering like this. One is when we clasp hands at meeting after four years of separation and find, in each other's eyes, that affection and kinship that come from a mutual and noble pursuit. It is astonishing, how in this supreme moment all the fictions of life fall away ; how the honorary titles of the world, its L.L.D.'s, its D.D.'s and its " Professors," are forgotten, and how, with a return to boyish familiarity, we say, in the language of Holmes,

" Your fist, old fellow ; off they go,
How are you, Bill ? How are you, Joe ?"

But there is another moment of deep feeling, of supreme sadness, when we stand, as now, with clasped hands, face to face with each other and our separation. For who shall say what is behind that curtain, which hides from human view the weal or woe of the future ? But, whatever may lie before us, the delightful experiences of the past few days have become an eternal possession. I think, as I said in my opening remarks, that the best work of this convention, and of all con-

ventions, is the relations and mutual interests that are here formed. Old Sam Johnston used to say that a man should keep his friendship in continual repair. These conventions are the repair shops and factories of friendship, and I feel sure that many of us will go back to our homes, bearing with us not only sweet memories of friendships renewed, but rich satisfactions in new friendships formed here in this hospitable household.

In conclusion, I desire again to thank you for the kindness you have manifested towards me, not only in electing me to preside over this meeting, but also for the courteous resolution you have just adopted. If I have succeeded in conducting the proceedings in a satisfactory manner, it is not owing to any particular wisdom in me, nor to any exceeding knowledge of parliamentary forms, but it has been due to your kindness and forbearance, and I thank you for that, as well as for the honor you have conferred upon me.

And now, bidding you farewell, hoping for every one a safe journey and return to his home, I will ask the Rev. Dr. Thomas Gallaudet to close the convention with prayer.

REV. DR. GALLAUDET : A single word before I fulfill your request. We are permitted to use gentle, modest personalities at times. We are so constituted that they touch our hearts. We have been touched by some of these utterances to-night. And now I am called upon to close this really remarkable convention with a few petitions to Almighty God.

I began to teach deaf-mutes in 1843. I am 68 years of age. Perhaps I am entitled to the name of being the oldest member of the profession in connection with this convention. I have in mind the Professor Emeritus of the National Deaf-Mute College, Samuel Porter. I suppose he is the oldest member of the profession in the country at this time. However that may be, I am sure that you will pardon me if I say that his life work with which I have been personally familiar, I look upon with great satisfaction and pleasure.

We all know the trials and hardships, the downright daily work which have encompassed the lives of us all ; but still, dear friends, let me add my testimony, it is one in which we can have the supreme satisfaction of knowing that it is a life of great usefulness.

And now we come, after these earnest deliberations, these expressions of honest views, from our different stations and associations in life, we now come to the close of this convention, and I am sure we are all responsive to the call that has come to us. Whatever may be our views, we can offer a short and earnest thanksgiving to the mysterious Being whom we call God, that we are at peace with him and at peace with all the world.

I will offer a few words of prayer, and I trust that you will join, at the close, in the simple form of devotion that our gracious Master, who once said Ephphatha to the deaf and dumb man, has given us.

Almighty and most merciful Father, we ask for thy blessing. May thy Spirit rest upon us and strengthen us, save us and help us. May we have thy grace to resist the temptations that come to us from the world, the flesh and the devil. God help us all to so act up to the light and the knowledge which we have, that we may have the gracious assurance, as we lay our heads to rest night after night for our needed

rest, that we are striving to do our duty in that sphere of life to which thou hast been pleased to call us. We thank thee for **all** the blessings we have received at thy hands. We cannot fathom **all** the mysteries which thou hast made known to us. Help us to sanctify the feelings with which thou hast endowed us, that we may respond more and more fully to the light that comes to us, and strive to live in such a way that we may recognize thy guiding hand. Help us, as we leave this gathering, and go to our homes and to our daily work. May we be blessed in **all** we are striving to do. May we be guided on the rest of our earthly pilgrimage ; and when our work is done ; when we have tried to help these, thy children, whom thou hast seen fit to deprive of hearing, and on whom thou hast laid some special trials and sorrows ; when we have labored to help them **all** to the best of our ability ; then, when our work is done, may it be our blessed privilege to join the great company of the Redeemed, who have passed away from their earthly sorrows and trials, and who are at rest. Hear us, accept and bless us. Pardon **all** our infirmities. Make us grateful for **all** our blessings. Hear our petitions and our thanksgivings and our praises, only for the worthiness of Him, our Mediator, our Lord and Saviour Jesus Christ, in whose name we offer our humble petitions.

Our Father who art in heaven, hallowed be thy name. Thy kingdom come. Thy will be done on earth, as it is in heaven. Give us this day our daily bread, and forgive us our trespasses, as we forgive those who trespass against us ; and lead us not into temptation, but deliver us from evil ; for thine is the kingdom and the power and the glory ; forever. Amen. .

May the grace of our Lord Jesus Christ, the love of God, and the fellowship of the Holy Ghost, be with you **all**. Amen.

THE PRESIDENT : I now pronounce the convention adjourned *sine die*.

[REPORT OF THE COMMITTEE ON NECROLOGY.—*Concluded.*]

EVA BALLARD.

Prepared by N. F. Walker, Principal of the South Carolina Institution.

Miss Eva Ballard died at Quincy, Mass., on August 20th, 1890, from injuries received in a railroad wreck near that place. She had been spending a part of her vacation with relatives at Cottage City, and was on her way to Boston, when the accident occurred.

In 1880, the authorities of the South Carolina Institution for the Deaf determined to add a teacher of articulation to its corps of instructors. Miss Ballard, then living with her parents at Ashville, N. C., was engaged. She had had no practical experience in teaching the deaf,

except for a few months in the Erie, Penn., Day School. She had taken a full course under Prof. A. G. Bell, in Boston, and was thoroughly versed in the object and uses to be made of "visible speech" in training the voices of the deaf. She entered upon her new work with all the zeal and interest that belongs to one fully imbued with "love, supreme to God, and universal, towards all mankind."

Her work soon evidenced the fact that she possessed all the elements that go to make up a successful teacher of the deaf. In all her work and amidst all her successes she was the same quiet, unassuming, Christ-loving woman; more thoughtful of the welfare of others than of herself. The record she left as a member of the Institution family was one well worth living for.

"To live in hearts we leave behind,
Is not to die."

NELLIE BAILEY.

Prepared by Eliza Moore Reed, of the Missouri Institution.

Died at her home in Callaway County, Mo., July 25th, 1887, Miss Nellie Bailey.

Her name will revive afresh precious memories of a life devoted to the services of the deaf. She was a woman of wide culture and varied attainments, possessing great force of character, yet ever quiet and gentle in manner.

For five years a teacher at this Institution, she labored with us full of life and vigor, with feet swift in errands of mercy and hands willing to perform every good work.

She endeared herself to all. Pupils and teachers alike cherish her memory as that of a treasured friend. It is sad to see one so talented, with life all before her, laid low on the sufferer's couch. The illness that seized upon her came so gradually that morning and evening alternately came, and the slow hours gathered into months before her most intimate friends realized that she must leave them.

She was patient during all her sufferings, which were at last so great that those who loved her most could not wish her to remain on earth.

From a human standpoint, 'tis a mysterious providence dealing thus with us, but "Shall not the Judge of all the earth do right?"

KATE A. CRANDALL.

Prepared by Dr. Warrington Wilkinson, of the California Institution.

Miss Kate A. Crandall, a teacher in the California Institution for the Deaf and Dumb, was born in San Francisco, May 24th, 1865, and died on the 30th of December, 1886, at Byron Springs, where she had gone for the Christmas holidays for relief from a sudden attack of rheumatism. Miss Crandall's parents were both deaf, and so she came to the profession with a perfect use of the language of signs and a valuable knowledge of deaf-mute modes of thought. She was a conscientious teacher; a woman of many and rare virtues; loyal to friend-

ship; faithful in service as her strength would allow; devout in thought and character. She joined the corps of instructors in 1882, and her four years' work in the class-room had been of value to herself as well as to the Institution, in providing the stimulus and environment for developing the latent powers of a singularly beautiful life. Her death was a severe blow to her friends and associates, who had come to appreciate her worth by daily observation of its genuineness.

JAMES SCOT DAVIS.

Prepared by W. O. Connor, Principal of the Georgia Institution.

James Scot Davis was born in Jackson Co., Georgia, but came to Floyd County in early life. He received an academic education, mainly in the Hearn School at Cave Spring, and entered the Institution for the Deaf and Dumb, to learn the art of teaching the deaf, in February 1858. In the Fall of 1861, he resigned his position as a teacher, to enter the service of his country, where he remained until the flag of the Confederacy was lowered in defeat in April, 1865. At the re-opening of the exercises of the School, in 1867, he came back to his former position, and worked, in season and out of season, with the exception of a year and a half, during which he was out of the work on account of ill health, until the summer of 1886, when, worn out in the service of the Institution, he was compelled to relinquish his work of twenty-three years. While but little was known of him, outside the Georgia Institution, he being a man who never left home, even for a day, unless in case of absolute necessity, yet the cause of deaf-mute education never had a more faithful, conscientious, or zealous worker. He was a Christian in every sense of the word, and died August 10th, 1890, at the age of fifty-two years, leaving behind him a wife and four children.

HENRY CLAY ENGLISH.

Prepared by David C. McCue, of the Missouri Institution.

Henry Clay English was born in Pike County, Missouri, October 5th, 1838. Being deprived of hearing at any early age, he sought his education in schools for the deaf. As a pupil he attended the State schools both of Missouri and Illinois, completing the course of study in the latter in 1860. Soon after leaving school, he engaged as teacher of the deaf in the State school at Baton Rouge, Louisiana. In the dark days of 1862, the doors of his school closed, to remain closed until 1866. Mr. English's patriotism now asserted itself, and in response to his country's claims, he voluntarily donned the gray and marched under the banner of the "Lost Cause." When the struggle finally ended, and the blessings of peace once more returned to the land, he quietly resumed his school duties at Baton Rouge. In 1874, he was elected teacher in the Missouri Institution for the Education of the Deaf and Dumb, at Fulton. There he spent the remaining fifteen years of his life—passing peacefully to rest, January 9th, 1889.

Of Mr. English, in his varied relations in life, his associate would

say he was a loyal, sympathetic friend ; a kind and indulgent father ; a stern, inflexible man of principles ; an earnest, energetic and efficient educator ; a pure and devout Christian gentleman. We are glad that hundreds of our pupils have enjoyed the elevating influence of his life, and can point the pupils of future years, with pride and confidence, to the enduring monument of love, which his social and moral virtues erected in the hearts and memories of his associates, as worthy of their highest emulation.

JAMES FISHER.

Prepared by W. O. Connor, Principal of the Georgia Institution.

James Fisher was born in England, and came with his parents to America in early childhood. He received about four years' instruction in the American Asylum, where a portion of the time he was taught by Laurent Clerc. He worked for a number of years in the Government Armory, at Harper's Ferry, and entered the profession of teaching in the Tennessee School for the Deaf, at Knoxville, where he remained about four years, leaving voluntarily about the close of the year 1860.

He became connected with the Georgia Institution in 1867, where he remained in constant and faithful service, to the close of the session of 1886—nearly nineteen years—when he retired from active work. He was a man of sterling qualities, and a fine example of what can be done by energy and application.

He died in Brunswick, Ga., February 10th, 1890, at the ripe age of seventy-four years, leaving a wife to mourn for him.

HENRY S. HITCHCOCK.

Prepared by Edwin G. Hurd, of the Pennsylvania Institution.

Henry S. Hitchcock, who was connected with the Pennsylvania Institution for the Deaf for ten years, died September 19th, 1887. Mr. Hitchcock was born on September 9th, 1852, at Galesburg, Illinois. He entered Knox College at that place in 1870, and remained until his Senior year. He then went to Williams College, where he was graduated with honor. Having decided to devote his attention to teaching, he accepted a position in the Pennsylvania Institution, at Philadelphia. He entered his new field of labor with great earnestness. He devoted all of his energies to the advancement of his pupils.

He was their constant friend and helper, and by his exertions won from them a lasting friendship. After ten years of labor in the Pennsylvania Institution, he resigned his position, by reason of failing health, and spent the following year in Europe. Not improving any from the change, he returned to this country, where he remained for some time under the medical advice of an eminent physician. For a time he seemed to improve in health, but contrary to the expectations of his friends, died suddenly on September 19th, 1887.

In character, Mr. Hitchcock was strictly conscientious in all he did. He constantly followed the better impulses of his nature, striving at all

times to brighten and make more pleasant the lives of those with whom he came into contact. In his death, the deaf and all of his associates mourned the loss of a devoted companion and a true friend.

J. P. KELLY.

Prepared by Olof Hanson, of Minnesota.

Mr. J. P. Kelly died at Colorado Springs, Colorado, March 20th, 1887, of disease of the heart.

He was a graduate of the Minnesota School, and of the National College, class of '81. "As a boy in school he was bright, witty, full of sunshine, good spirits and jolly good-nature." The same traits distinguished him in after life. At college, he was popular with his fellow students, took a prominent part in out-door exercises, and, in general, whatever he undertook to do he entered into with spirit and enthusiasm. He was a semi-mute, having lost his hearing at the age of seven years. He always kept up the use of speech, was an agreeable companion, a good conversationalist and a pretty good lip-reader. He once told me that during three months which he spent among hearing people, he carried a stump of a pencil about two inches long in his pocket, but at the end of the three months it had not perceptibly diminished in length.

In 1884, he became a teacher in the Minnesota School, and for more than two years he labored faithfully and efficiently for the advancement of the pupils and the good of the school. Early in the winter of 1886, he had an attack of hemorrhage of the lungs, and was advised by his physicians to try a change of climate. He went to Colorado, and the change "was working favorably on his lungs, but at the same time an old difficulty, heart trouble, was increasing, till a severe attack came on which resulted in his death as already stated."

He was much interested in the welfare of his class, and in school as well as out of school he was ever ready to respond to any call where he could be useful to the cause of education or the advancement of the deaf.

MOSSIE McGANN.

Prepared by J. R. Dobyms, Principal of the Mississippi Institution.

Miss Mossie McGann, an account of whose life and character was given in the *Annals of the Deaf*, in January, 1889, the fourth daughter of Mr. J. B. McGann, of Canada, died at the Mississippi Institution for the Education of the Deaf, in Jackson, October 29th, 1888.

Miss McGann had been the articulation teacher of this Institution for six years, and in her death, not only the Mississippi Institution, but the profession at large, suffered a great loss.

She was a woman of great energy and rare talent. She had been pre-eminently successful, and left a record that will reflect great honor upon her memory as a teacher of the deaf.

At her own request, she lies in the Jackson cemetery, where the officers, teachers and pupils, of the Institution, delight to keep fresh

the memory of a kind friend and a worthy and competent teacher, whose death they have never ceased to mourn.

REV. JOHN HANCOCK PETTINGELL.

Prepared by F. W. Rooth, of the Pennsylvania Institution.

The Rev. John Hancock Pettingell died at New Haven, Conn., on February 27th, 1887, at the age of seventy-two years. He had been for seven years previous to 1885 a successful teacher in the Pennsylvania Institution for the Deaf and Dumb, and earlier, for several years, a teacher in the New York Institution. He educated himself for the ministry, graduating from Union Theological Seminary. His ministerial work includes several pastorates, the secretaryship of the American Board of Foreign Missions, and the Chaplaincy of the American Seaman's Friend Society, at Antwerp, Belgium. He was the author of several widely read theological works. He put the same interest and energy into his school work that he put into his ministerial work, and his success was commensurate with his zeal.

BENJAMIN DEAN PETTINGELL.

Prepared by William A. Caldwell, of the Pennsylvania Institution.

The name of Benjamin Dean Pettingell was quite familiar to me long before I became connected with the Pennsylvania Institution for the Deaf, and it was with considerable interest that I looked forward to a meeting with the gentleman bearing that name. That meeting but confirmed my previous conviction, formed from a perusal of Mr. Pettingell's contributions to the *Annals*, that he must be a man of strong character. At the time of that meeting, Mr. Pettingell was not actively connected with the school, having been retired on half-pay a short time before, in consideration of his many years of faithful service in the schoolroom. Forty-five years of his life he was a teacher in the Pennsylvania Institution. He was born in 1813, and at the time of his death he was seventy-five years of age. It is a strange fact that he met his death while walking on the railroad track—something which he constantly warned his pupils against. I heard a teacher say that he believed Mr. Pettingell never permitted an occasion to pass unimproved when he could point out to the deaf their peculiar danger in walking on the railroad.

My brief acquaintance with him makes it impossible for me to say much of his work as a teacher, but from the testimony of those who knew him best, and from my observation of certain features of the Philadelphia School, which are plainly more or less due to his influence, I can assert with confidence that but few persons give themselves to the work as unreservedly and unselfishly as did Mr. Pettingell. He was eccentric, but he was kind; he was unpolished, but he was sincere. He did not hesitate to supply from his own means anything he considered essential for the improvement of his class, and there can be

no question that his life and example have left a lasting impression for good on the minds of those who have received instruction at his hands.

W. J. PALMER.

Prepared by R. Mathison, Principal of the Belleville Institution.

Dr. W. J. Palmer, formerly Principal of the Ontario Institution, died at the Morganton Asylum for the Insane, Raleigh, North Carolina, in June, 1888. He was a graduate of the the Columbian University, was appointed a teacher in the North Carolina Institution in 1856, was made Principal in 1860, acting as such until 1870, when he accepted the Principalship of the Ontario School, where he remained until September, 1879. Dr. Palmer, in his early life, was distinguished as an earnest, capable instructor of the deaf, made many friends by his genial disposition and manners, and managed the Institutions over which he had charge with tact and ability. In his later years an unfortunate habit destroyed his usefulness, and he was relieved from his charge in Ontario in consequence. His mind finally gave way, and death came to his relief at Raleigh as before noted. He took an active part in several of the Conventions and Conferences of Principals, in 1868 being elected a member of the Standing Executive Committee of the Convention. His friends, who knew and esteemed him for the good qualities he possessed, regret his melancholy and tragic end.

E. LORING TURNER, M.D.

Prepared by G. D. Euritt, of the Virginia Institution.

As a representative of the Virginia Institution, it is my sad duty to announce to the convention, the death of Dr. E. Loring Turner, which event occurred on the 9th of February, 1888.

Dr. Turner was born in Loudoun County, Va., August 5th, 1851; was educated in the profession of medicine, at the University of Virginia, and at Bellevue Hospital, New York, and after graduation practiced successfully in his native county for several years. Being the son of deaf-mute parents, the sign-language was, as it were, his mother tongue, and his interest in the deaf as a class impelled him to abandon the practice of medicine to become a teacher in the school, where his father had spent so many years of usefulness.

Dr. Turner was a faithful, patient and successful teacher, and even when he realized that the insidious disease, consumption, had marked him as a victim, he continued his labors with unabated zeal, until the grim messenger met him in the path of duty, and claimed him as his own.

ELIZABETH B. TURLINGTON.

Prepared by D. R. Tillinghast, of the North Carolina Institution.

Elizabeth B. Turlington was born in Wilmington, N. C., of respectable parents, and lost her hearing old enough to have such knowledge

of language as enabled her to make remarkable progress in its study, when she entered school at the age of nine years. On the completion of an eight years' course of study, she was appointed a teacher in the primary department. When a cooking school was established at the Institution, there was no young lady better fitted than she to make its success an undoubted fact, and she was consequently appointed to conduct it. She succeeded, because she tried to perform her duty conscientiously and with rare judgment. In the fall of 1886, she was appointed matron of the girls, and in the performance of the new duties of that responsible position she showed herself admirably fitted for it. A week before Christmas, 1886, she met her tragic death, the facts of which are too fresh in our minds to require repetition.

A. JOSEPHINE VINTON.

Prepared by Caroline A. Yale, Principal of the Clarke Institution.

A. Josephine Vinton, a teacher of five years' standing in the Clarke Institution, passed away from earthly labors on the thirty-first day of January, 1889. She was a faithful, skillful teacher, and a noble, earnest woman.

WILLIAM WILLARD.

Prepared by S. J. Vall, of the Indiana Institution.

Mr. William Willard, founder of the Indiana Institution, entered into the rest of Paradise on the 15th of February, A.D. 1888, at the ripe age of seventy-nine years. He was one of the early pupils of the American Asylum. After graduation, he was appointed to the position of teacher at the Ohio Institution, at Columbus, where he performed acceptable work for several years. In 1844, he went to Indianapolis, Ind., and started a school. As a means of gathering together pupils, he canvassed most of the State on horseback. The State then was almost a wilderness. His trials were peculiar to the pioneers of deaf-mute education in early days. He met them bravely and successfully, and lived to see a large and well-equipped Institution as the fruit of his early labors.

HENRY DEW WALKER.

Prepared by E. P. Gale, of the Maryland Institution.

Henry Dew Walker, after a short illness, died at Olathe, Kansas, February 3d, 1889. Born in Illinois, February 2d, 1849, his life, at its termination, had just completed the short span of twoscore years—years, however, full of usefulness and promise.

Mr. Walker engaged in teaching soon after the completion of his course in college, and followed that profession all through his life, or for twenty years, the last four of which were spent in the instruction of the deaf at the Kansas Institution, where he was teaching at the time of his death.

He was a man truly devoted to his profession, thorough and systematic in his work, pleasant, patient, and unsparing in his efforts in behalf of those under his instruction. He investigated subjects for himself, and was an original and progressive thinker, ever seeking new and more excellent methods of teaching. In the months just preceding his death, he had been engaged in writing a historical story which promised to have been one of much interest, and his summons hence, no doubt, was hastened by the additional labor involved in bringing this work to completion, together with his labors on an article, which he was preparing at the time, for the *Annals*, to which he had previously made valuable contributions.

Although cut down in the prime of life, and but a short time in the special work of instructing the deaf, yet such were his attainments and so full of promise were his years, that his death was—who can say how great—a loss to the profession at large as well as to the Kansas Institution.

During his last hours, his Christian character was beautifully exemplified in his humble resignation to the Divine will. He passed away full of hope, and in the bright assurance of a glorious resurrection.

HARRIET B. WILLARD.

Prepared by Dr. Warring Wilkinson, Principal of the California Institution.

Mrs. Harriet B. Willard was born on the 5th of July, 1814, and died on the 14th of January, 1887. For sixteen years she had been the matron-in-chief of the California Institution for the Deaf and Dumb, and the Blind, and all who attended the Eleventh Convention will remember her untiring zeal and effort in ministering to the comfort of the guests on that memorable occasion. Mrs. Willard was the ideal matron; a woman of most exemplary Christian character, and in the largest sense of the word, a mother to the children under her charge. Her daily life was a sermon, with love and duty for its text. In sickness, a tender and devoted nurse; in health, a wise counselor and friend; everywhere a fine type of Christian womanhood; she has left, as a heritage to those who were associated with her, the memory of a thousand gentle deeds, and the example, in a subordinate sphere, of high and noble living.

SUSAN D. YARD.

Prepared by R. B. Lloyd, of the New Jersey Institution.

Susan D. Yard was the first teacher whose connection with the New Jersey School for Deaf-Mutes was severed by death. She was connected with the school from its first opening, in 1883, and had never been absent from her class-room on account of sickness. A few days before Thanksgiving, in November, 1889, she went home, apparently suffering from malaria. A day or two after her arrival home, news came that she had typhoid fever. She grew steadily worse, and, at last, on the 19th of December, she bade farewell to the friends at her bedside and went to her home in Heaven.

Miss Yard was a graduate of the State Normal School at Trenton, and, at the time of her death, was only twenty-six years old. She was a very valuable acquisition to the school, for she at once showed remarkable readiness in comprehending the peculiar difficulties the deaf have to encounter in their acquisition of language, and was apt in devising means to aid them in overcoming these difficulties. Had she lived, we had fair promise that her usefulness would steadily increase with added years and experience.

Miss Yard was a Christian lady, and had great influence over her pupils. Every Sunday, she took such of the pupils as wished to go, to church with her, and acted as their teacher in Sunday School and interpreter in church. Among the teachers and her friends, and on all occasions of social reunion, she was lively and bright and did her best to entertain. During her last sickness, her thoughts were often with her pupils, and when she knew she was to die, she said, "I would like to get well, for I think that there is more work that I can do, but if not, all right."

ELISHA C. JONES.

Prepared by T. L. Moses, Principal of the Tennessee Institution.

Elisha C. Jones, who died in Knoxville, Tennessee, on July 13th, 1889, had been for more than twenty years the efficient Steward of the Tennessee School for the Deaf and Dumb.

Mr. Jones was born in Virginia, near Estillville, in the year 1835, being fifty-four years of age at the time of his death.

Mr. Jones devoted his early life to farming. In this work, as in his latter labors for the deaf, he was active, industrious and intelligent; and he was known as a model farmer. His early training, and his natural qualifications of head and heart, peculiarly fitted him for his later stewardship of an institution for the deaf and dumb. He was a man of rare kindness of heart and sympathetic disposition. He was particularly attentive and kind to the sick; and the deaf children, who went to him in distress or trouble of any kind, always found in him a ready and helpful friend.

Mr. Jones was a man of scrupulous integrity in all his business relations. He was faithful in little things as well as in affairs of greater magnitude, and his every work was well done. The children all responded quickly to his kindly interest in them, and loved him as a father. It was truly said of him by a friend: "While he neglected no duty in any relation in life, he was one of those whose greatest pleasure and success is in doing good to others."



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